University of Washington
Study of Attrition and Retention
2006

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Improving Learning Through Assessment

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PURPOSE

The literature on diversity increasingly suggests that diverse student populations add value to the learning of all students, positively affecting students' higher levels of complex thought and creativity, decision-making abilities, lifestyle choices, and work performance (Antonio et al., 2004; Hurtado et al., 1999). However, because of the relative homogeneity of student and faculty populations at Washington colleges and universities (Washington State Higher Education Coordinating Board, 2006), students attending Washington state institutions of higher education may not be able to realize such benefits.

At the University of Washington (UW), exacerbating the lack of ethnic diversity caused by low enrollments are the higher attrition rates of underrepresented minority students (including Black, Latino/Latina, Native American, and Hawaiian/Pacific Islander students) relative to those of White and Asian American students, a pattern that has held true since at least 1985.[1] Although projections suggest that retention rates for underrepresented minority students may converge with those for White and Asian American students over time at the UW, the high variability of underrepresented minority enrollment and stop-out[2] rates makes the reliability of such projections questionable. Furthermore, even if the rates of retention for underrepresented minority students became identical to those of White and Asian American students, underrepresented minority students would still be underrepresented at the UW.

Conducted by the Office of Educational Assessment (OEA) and the Office of Minority Affairs and Diversity (OMA/D), and supported by the Provost's Office, the UW Study on Attrition and Retention aimed to clarify and deepen the University's understanding of why underrepresented minority students leave the UW at higher rates than those for Asian American and White students. This report presents results from that study.

This report does not argue that some students are more important to the UW than others. However, we acknowledge that the loss before graduation of a White student, while important to the UW, usually does not affect the capacity of other White students to succeed in the University environment. In contrast, a rich body of research, including our own conversations with UW students, staff, and faculty, suggests that the loss of a Black, Latino, Native American, and Pacific Islander student can have profound effects on those few Native American, Latino, and Black students who remain (Hurtado et al., 1999). Therefore, even if retention rates for all groups were identical,

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[1] In working with underrepresented groups on campus, we respect that different designations are acceptable to different groups when they are referring to themselves. At the same time, federal reporting requirements require data collection using specific terms. In this document, we use the term "underrepresented minority students" to refer to Black, Latino/Latina, Native American and Hawaiian/Pacific Islander students. We abbreviate the latter to Pacific Islander. We use Latino to refer to all Latino/Latina students. The term "students of color" includes Asian Americans and other ethnicities of color. We use Black and African American, and White and Caucasian, interchangeably. We also use multiracial and multiethnic interchangeably.

[2] We intentionally use the phrase "stop out" because it carries a less negative connotation than "drop out," and because it reminds us that students may leave the UW but pursue their academic or other aspirations elsewhere or at another time.

a study seeking to identify discernible patterns of loss among groups that are already underrepresented at the UW is critically important.

Following is a brief description of the methods we used in the study, our findings, and a list of our recommendations.

METHODS

We gathered and analyzed data from three main sources: demographic and academic data from the UW student database; financial aid records from the UW's Student Financial Aid Office; and conversations with 69 faculty, staff, and students. We used a semi-structured interview method to conduct individual and group conversations with faculty, staff, and students, and analyzed notes from those conversations inductively.

Regarding demographic and academic data, we extracted a number of variables for a combined sample of all incoming freshmen from 1999 through 2003 from the UW Student Database. We disaggregated ethnic categories so that we could identify and examine the retention patterns of multiracial students. Then, we analyzed the rates at which different ethnic groups left the University before degree completion and compared the students who left the UW with those who were retained by ethnicity, gender, high school GPA, SAT scores, and UW GPAs. Recent research (Sedlacek, 2004) suggests that cognitive variables, such as SAT scores and GPAs, provide less insight into whether students will stay in school than do noncognitive variables. However, because the UW does not systematically capture noncognitive variables, we were unable to incorporate this type of information into the more traditional variables that we examined.

Finally, in addition to traditional cognitive variables, we compared socioeconomic and financial aid variables of underrepresented minority, White, and Asian American students who entered the UW in 2001 and 2002 and were retained or left the UW in their first two years. Data on students' socioeconomic and financial aid status were provided by the UW's Student Financial Aid Office.

FINDINGS

Our findings on attrition and retention for students who entered UW from 1999 through 2003 showed that underrepresented minority students left the UW at higher rates than did White and Asian America students. Furthermore, our analysis showed that retention patterns for multiracial students whose backgrounds included underrepresented minority status were similar to patterns for those underrepresented groups. Multiracial students whose backgrounds did not include underrepresented minority status had retention patterns similar to their White and Asian American counterparts.

Our analyses of conversations with faculty, staff, and students, as well as of UW Student Database and financial aid data point to several influences on underrepresented minority students' decisions to leave the UW. These are campus climate; financial issues; differences between academic needs and family/community/cultural expectations or needs; pre-college and first-year academic experience; waiting/being embarrassed to ask for help; work-related issues; and not getting into one's major of choice.

Of these, the strongest influence—indeed, one that has a bearing on all the others—is a campus climate that feels unwelcoming to underrepresented minority students in a number of ways.

Furthermore, our conversations with faculty, staff, and students strongly suggested that underrepresented minority students most likely do not leave the UW because of any single factor acting alone; rather, the interaction of factors likely causes students to decide to leave.

What Entering Freshman Carry

We know from the UW Study of Undergraduate Learning (UW SOUL) (Beyer, Gillmore, & Fisher, 2007) that nearly all freshmen enter the UW with a set of shared attitudes and behaviors that can help them do well or make life at the UW harder. For example, many freshmen hesitate to ask for help, particularly in their first quarter, because they believe they should already know how to do what is required of them. Underrepresented minority students arrive as freshmen with the same attitudes and beliefs in regard to academics and college life that other freshmen carry. Along with White and Asian American students, they share the same hesitation to ask for help, the same habits of study that gave them strong grades in high school, the same sometimes fatal attraction to video games and TV, and the same desire to make new and deeper friendships than they experienced in high school.

In addition to what they share with majority students, underrepresented minority students bring experiences as people of color into the University. Many underrepresented minority students have had to navigate both the institutional legacy of racism in the U.S. and their own face-to-face experiences with racism. These experiences have shaped them in ways that are different from their White peers. Therefore, most underrepresented minority students enter the UW carrying the beliefs and attitudes that most freshmen bring to the UW, as well as an additional set of attitudes, beliefs, and approaches shaped by their experiences as people of color.

Underrepresented minority students, as well as Asian American students, may also go through racial identity development processes that are different from those of their White peers. Research tells us that underrepresented minority students are likely to find themselves in situations at the university—both academic and social—that challenge them to explore those identities (Tatum, 1997) and take them into account in social and educational decision-making.

Finally, as faculty, staff, and students made clear to us, the University that many Black, Latino, Native American, and Pacific Islander freshmen enter is different from that entered by White students who come to the UW. Research confirms that underrepresented students attending predominantly White institutions enter campuses that often have a historical legacy of excluding people of color (Hurtado et al., 1998). Thus the campus that underrepresented minority students enter often feels unwelcoming, communicating to them that they do not "belong" there.

The Message of Campus Climate

The campus climate issues raised by faculty, staff, and students included what Hurtado et al. (1999) describes as structural, behavioral, and psychological aspects of climate. As this report details, the UW communicates belonging and non-belonging in many subtle and unsubtle ways. Students sense they belong at the UW when they see many other students who look like them in their large classes. They feel that they belong when other students ask them to join study groups; when faculty include minority histories or cultures in courses; and when it is clear that underrepresented minority students' opinions, values, and experiences are important to the institution and shared by it. They feel that they belong when they can interact comfortably and directly with others, rather than

having to weigh behaviors, words, and interactions, constantly asking, "What just happened? Is this about my race?" For example:

> *"There has not been one single test where someone has sat next to me. There can be five seats available, but the seat next to me is last the seat chosen. Every time I walk into a test, I'm the last person to be sat by."*

When underrepresented minority students get the message that they do not belong, as one faculty member said:

> *"They pick up that message. Just think of a lifetime of those messages being sent and those kids internalizing them."*

A campus climate that suggests to underrepresented minority students that they do not belong in college is harmful to retention in itself. Furthermore, faculty, staff, and students with whom we spoke noted that negative aspects of campus climate increase the impact of other influences on students' decisions to stay in college or leave, such as family and community needs and how students react to not getting into their first major of choice. Perhaps more important, the message that underrepresented minority students do not belong at the UW amplifies other powerful influences on students' decisions to leave.

Financial Issues

In addition to campus climate issues, faculty, staff, and students said that financial need and its related problems cause students to leave the UW. Interviewees pointed out several potential effects of financial need. Several noted, for example, that financial need can lead to some students working longer hours than others, which can affect their academic work. In addition, they noted that different cultures ascribe different meanings to debt, and these meanings affect students' willingness to incur debt. They also pointed out that many underrepresented minority students continue to directly or indirectly provide financial resources to their families.

Student Financial Aid data[3] confirmed faculty, staff, and students' reports that underrepresented minority students (as well as Asian American students) have somewhat greater financial need than do White students. Furthermore, fewer underrepresented minority students who stopped out applied for financial aid than did underrepresented students who were retained, suggesting that financial considerations play a role in the decision of underrepresented minority students to stop out. In addition, financial aid data showed that underrepresented minority and Asian American students tended to have greater unmet financial need in their first year of enrollment than did White students, with students who stopped out in their first or second year tending to have greater unmet need in their first year than students who were retained beyond their first two years.

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[3] Due to the complexity of the Student Financial Aid database, analyses of these data are presented as suggestive only. A more in-depth analysis of Financial Aid data, in collaboration with the Office of Student Financial Aid, would allow us to clarify some of our findings and to extend what we have learned to all low income students.

Differences between Academic Needs and Family/Community/Cultural Expectations or Needs

About 70% of the faculty and staff with whom we spoke and nearly all the students with whom we met mentioned differences between what it takes to be successful at the UW academically and the expectations, needs, and values of students' families, communities, and cultures. Interviewees pointed out that even if parents are committed to helping their children succeed at the UW, they may not fully understand what academic success requires, and, therefore, they may call on their children to provide financial or other kinds of assistance to the family that hinder student success. Some faculty and staff members noted the obvious interaction between family needs and financial issues, observing that even when parents do understand how hard college can be they sometimes have few choices other than to ask for their sons' or daughters' help.

Dove-tailing with the real needs of families and communities are students' own values. Faculty and staff noted that many underrepresented minority students place higher value on family and community well-being than on their own academic success. In fact, underrepresented minority students with whom we spoke often referred to focusing on their own academic success as "selfish." Therefore, when the family or community needs the student's help, he is likely to provide that help, whether or not his grades may suffer for it. As one student said:

> "[The UW] can't ask me to put my grades first because my family always comes first, so when they say that it really bothers me. They don't understand."

In addition to a sense of commitment to their families, underrepresented minority students also have strong values around helping advance their communities. Faculty and staff pointed out that many underrepresented students are actively engaged, formally and informally, in recruiting other students of color to the UW, tutoring in inner-city schools, serving on committees and in organizations aimed at helping underrepresented populations do well, and assisting each other with school work and social issues. Some faculty and staff members spoke about this commitment to community needs as "second jobs"—though unpaid—and voiced concerns about the time this work took from students' academic work.

Pre-college and First-year Academic Experience

Literature on retention indicates that there are two dimensions to academic performance that are related to college attrition: students' high school academic experience and their first year of college work (Upcraft, Mullendore, & Fidler, 1994; Rendón, 1994; Mohammadi, 1994; University of Minnesota, 2003). To explore these factors, we obtained academic performance data from the UW Student Database: students' high school GPA, SAT scores, and UW GPA after the first year. Analyses of these data reveal relatively small differences in high school GPA and SAT scores between retained and non-retained students.

There were, however, striking differences between these groups of students in first-year UW GPA, a pattern that was more pronounced among underrepresented groups. Most notably, students who stopped out after their first year showed much more precipitous declines in GPA between high school and UW than students who were retained after the first year. These GPA gaps were much wider among Native American (dropped an average of 1.93 GPA points), Black (average gap: 1.93), Asian American (average gap: 1.41), and Latino (average gap: 1.35) first-year stop-outs than among White first-year stop-outs (average gap: 1.00). Second-year stop-outs, on the other hand, while still

showing more dramatic declines between high school and first year of college than retained students did not show remarkably differential gaps across different categories of ethnicity.

There are several possible interpretations of this finding. The drop in GPA between high school and first year of college is consistent with comments from faculty and staff about the possibility that students from under-funded high schools might have had a pre-college experience that was extremely different than what they experienced at the UW. Additional data analyses revealed significantly wider GPA gaps among students who went to high schools where there were over 30% free or reduced lunches (an indication of a low-income area where funding might be scarce) than among students from less impoverished high schools. Under this interpretation, UW GPA is primarily an outcome measure indexing degree of academic preparedness as students enter from high school, and is directly causal in students stopping out.

However, another interpretation is suggested by the complexity of factors that were observed to relate to attrition, namely, that UW GPA is in part a reflection of academic preparedness, but that it is also affected by other factors that also have their own direct impact on attrition. Based on this interpretation, causal factors for attrition that are particularly relevant to underrepresented students, such as climate or family expectations, might be more critical in the first year than in the second.

Waiting/Being Embarrassed to Ask for Help

About 40% of the faculty and staff we interviewed, but none of the students, said that underrepresented students' inability to ask for help—often until it was too late for those working with them to provide it—was a factor in students leaving the UW.

As noted by the UW Study of Undergraduate Learning (Beyer, Gillmore, & Fisher, 2007), many, if not most, entering students are afraid to ask questions in class or to seek help outside class. As a group, freshmen have unrealistic expectations about what they should already know when they arrive, and they are often embarrassed to reveal ignorance about navigating the University or understanding course materials.

In addition to entering with the normal burden of fear of exposing ignorance that other freshmen bring to the UW, however, underrepresented students are dealing with the climate issues discussed previously. Students reported that they often felt that asking for help in class brought the spotlight toward themselves and that asking a question or asking for help outside class—i.e., not knowing the answer already—might reflect badly on their ethnic communities, reinforcing the idea that they do not belong at the UW.

Work-Related Issues

About a third of the faculty and staff we interviewed mentioned work-related issues as factors in underrepresented minority students' decisions to leave the UW, as did many of the students. This issue was closely connected with financial issues discussed earlier. Faculty and staff noted that students of color often commute long distances to jobs off campus, sometimes to jobs they have held since high school, and that the commuting time puts them at both an academic and a financial disadvantage. It also removes them from campus for long periods of time, affecting social networks and participation in extracurricular academic events.

Not Getting into One's Major of Choice

Faculty, staff, and students noted that not getting into one's major of choice or experiencing delays in getting into a major often influenced underrepresented students' decisions to leave the UW. While this may be a problem for all students, interviewees noted that when this problem is experienced in combination with others, such as extreme financial pressures or feeling unwelcome at the UW, it can cause underrepresented students to leave.

Interaction among Factors

Our statistical analyses and conversations with faculty, staff, and students suggested that rarely do underrepresented minority students leave the UW because of a single factor. Rather, students' decisions to leave the UW are likely influenced by multiple factors interacting with each other. For example, an underrepresented minority student may get a low grade on an exam—an experience most UW freshmen share (Beyer, Gillmore, & Fisher, 2007)—but the negative message the grade carries may be exacerbated by her isolation as the only Black student in the class. Unmet financial need may cause an underrepresented minority student to work 30 hours a week, making it impossible for him to find the time to see an advisor for help with a scheduling conflict. An underrepresented student's commitment to her family may mean that she commutes back and forth over the mountains every weekend to contribute to family finances, decreasing the amount of time she has to study and increasing the cost of her education.

The influence that one aspect of the underrepresented minority student experience has on another in students' decisions to leave the UW suggests that change must be aimed in several directions.

Even so, in considering changes that might affect retention, the University must not neglect the strong influence of campus climate. As one staff member put it:

> *"I think students of color, coming from our background with so many things that we have got to manage—we need that trusting environment. If I don't feel affirmed, safe, or understood, it is going to be easy for me to detach from this environment and make an easy exit as soon as the door opens."*

Any meaningful change will take the importance of a welcoming campus climate into account.

Connections between Underrepresented Minority Student and Underrepresented Minority Faculty and Staff Experience

Although we did not ask them directly, faculty, staff, and students all pointed out that underrepresented minority faculty and staff experience the same sense of commitment to their communities that the students feel. This often means that minority faculty and staff are mentoring and advising all the students of color who seek them out, as well as serving on many university and community committees and councils. The Special Committee on Minority Faculty's open letter to President Mark Emmert noted some of these problems in February 2005.

What Helps Retain Students

In their conversations with us, faculty, staff, and students identified three key reasons for students' persistence, and students added a fourth. These were as follows:

- About 35% of the faculty and staff, as well as a large number of students, said that family support and family pressure to continue kept students in school. Regarding the importance of families, students also noted that a sense of commitment to their families and communities helped keep them in college.
- One-third of the faculty and staff we interviewed and a number of students noted that connections with faculty, staff, and peers often keep students in school. Students noted that having a faculty or staff member on campus who believes in them and shows concern helps them persist in the face of challenges.
- About a fourth of the faculty and staff interviewed noted that the students' own motivation, desire, and will pulled them through school. These personal attributes and others are well-documented by Sedlacek (2004).
- Students noted that involvement in community-based activities, also one of Sedlacek's noncognitive variables for assessing and predicting student performance (2004) gave them a sense of belonging and purpose, which in turn helped them continue on their educational paths.

Retention Considerations for Specific Populations

In speaking about pressures felt by specific ethnic groups, faculty and staff often asserted that such pressures may be felt more keenly by some groups than others. However, they noted that for every group, challenges were more severe for first-generation college students than for students whose parents went to college. In addition, several pointed out that differences within groups may be more pronounced than differences across them.

Regarding underrepresented minority groups, faculty and staff said that Black students may feel more isolated at the UW than others and may receive a stronger message than other groups that they do not belong at the University. They suggested that Latino students may feel more cultural need to assist their families both personally and financially than other groups. Faculty and staff also said that Native American groups may experience the University as a more "alien place" with values more different from their own and those of their families than other groups might experience. Furthermore, they noted that students from the Pacific Islands may have trouble being far away from family and a culture that centered on family and relationships. Faculty, staff, and students also noted that the category of "Asian American students" is too monolithic to be informative and the differences across Asian American groups that need to be identified are "hidden" by the single label "Asian American."

In addition, faculty, staff, and students said that multiracial students are engaged in powerful identity questions while at the UW, and they are often pressured to "pick a side"—identifying as mono-racial rather than embracing all parts of their ethnicities.

Finally, faculty, staff, and students also spoke of different retention needs of transfer students, gay/lesbian/bisexual/trans-sexual students of color, non-native English speakers, first-generation college students, and recent immigrants.

Faculty, Staff, and Students' Ideas for Change

Faculty, staff, and students presented many ideas for change. Student suggestions included improving the critical mass of underrepresented minority students, faculty, and staff on campus; providing more activities and smaller classes for students so that they might have more contact with faculty and peers; providing more outreach and better recruitment of underrepresented students; relocating the Ethnic Cultural Center (ECC); increasing the size and staff of the Instructional Center (IC); and formally recognizing students' cultural heritages, such as Stanford University did when it built a longhouse on campus for Native American students.

Ideas for change offered by several of the 40 faculty and staff we interviewed included considering ways in which the University can support underrepresented minority students in their use of financial aid services; creating a child care center for student parents; continuing to focus on advising services as an important component in the retention of underrepresented minority students and ensuring that they see departmental advisors early in their academic programs; forging better and deeper connections between UW administration/departments and underrepresented minority students' families and communities; and speaking with students who left the UW about what might have helped them stay.

RECOMMENDATIONS

Much of what we learned about underrepresented minority students at the UW has been well-described in the literature on retention. We learned that a range of factors affect students' decisions to leave the UW. More important than these individual factors, however, is their interaction with each other. This result is critical to our recommendations, because if the UW is to institute changes in its practices or policies to improve retention of underrepresented students, change in one area will need to accompany changes in others. With this need in mind, we make the following recommendations:

Climate

- Develop and implement a plan to increase numbers of underrepresented minority faculty, staff, and students so that the ethnic diversity of the UW accurately represents the ethnic diversity in Washington state by 2012. Although having more people of color on campus does not, in and of itself, create a welcome, inclusive campus climate, a critical mass of people of color on campus is an important component in improving campus climate for all students.

- Hire more faculty from all ethnic groups who have a demonstrated record of working with communities of color and teaching students of color.

- Actively lead the UW to an institution-wide focus on diversity, including reviewing and setting priorities for faculty structure and rewards, taking into account service to diverse communities and research on diversity issues.

- Increase cross-racial interaction in and outside the classroom, for example by providing students with opportunities to work in small groups.

- Increase faculty/student interaction, for example by providing opportunities for students to work on faculty research.

- Increase opportunities for people to interact across cultures.

- Conduct campus climate assessments on a regular schedule to understand the effects of efforts to improve campus climate and to ensure that perspectives of all members of the community are heard in decision-making processes.

- Guarantee that the organizations and support services created for students of color have adequate funding, staffing and other resources to serve students. For example, faculty, staff, and students all recommended that the UW enhance and expand the Instructional Center and the Ethnic Cultural Center.

- Begin conversations with OMA/D about the advantages and disadvantages of locating their facilities more centrally on campus in order to address the geographical marginalization of services for underrepresented minority students.

- Hire more faculty to work specifically on diversity research.

- Provide support for faculty and departments to integrate student-centered, active-learning, and culturally relevant pedagogies into existing teaching practices.

Financial Issues

- Track the effects of the Husky Promise to determine which populations it serves and how well it meets the financial needs of student recipients.

- Systematize the on-going efforts of the Office of Student Financial Aid to provide early identification and intervention for students who are experiencing financial difficulties. Due to a lack of resources, the current process relies on students to self-identify. Provide for automatic contact from a UW representative who is sensitive to the needs and concerns of underrepresented minority students and their families. Include staff who have worked effectively with students in the past and who represent a variety of UW areas in the planning and development of such a system.

- Determine ways to help ensure that financial aid packages are more grant-based than loan-heavy.

Differences between Academic Needs and Family/Community/Cultural Expectations or Needs

- Develop more ways of communicating what it takes to graduate from college both to underrepresented students and to their families.

- Increase two-way communication between UW administration and faculty and the communities from which underrepresented minority students come, becoming a strong presence in those communities so that two-way communication can occur and relationships between communities and the UW can "deepen."

- Formally and informally reward—through monetary rewards, reduced work hours, a personal acknowledgement or word of thanks from the President and Provost—faculty, staff, and students whose community service work helps the UW make its commitment to diversity manifest.

- Provide information on the OMA/D and UW Counseling Centers to advisors, TAs, faculty, and others who may encounter students who are dealing with complex family-related issues, such as divorce, childcare, death, financial stress, and cultural expectations.

Pre-college and First-Year Academic Experience

- Use proactive methods to intervene early when students experience academic problems, for example, using the gap between underrepresented minority students' high school and second-quarter UW GPAs as a marker for intervention.

- Create a viable pathway for re-entry into the UW for underrepresented minority students who left or were dropped because of academic performance, and re-recruit underrepresented minority students who left the university in good standing.

- Increase the capacity of OMA/D's Instructional Center.

- Create a mentoring program where junior and senior underrepresented minority students are matched with freshman and sophomore underrepresented minority students whose grades fall below a 2.6 in the first quarter (a loss of about 1.0 point from a strong high school GPA).

- Consider seeking external funding for Instructional Center satellites in targeted community centers to improve students' skills before they come to college and to increase the pipeline of underrepresented minority students to college.

- Provide more and earlier support and preparation for underrepresented minority students to help them get into their majors of choice.

- Increase the number of Diversity Scholars at the University.

Waiting Too Long to Ask For Help

- Create a culture inside and outside the classroom where questions are welcomed.

- Create retention intervention programs that seek out students who need help.

Work-related Issues

- Increase the number of work-study and other student positions on campus that connect with the academic programs and interests of underrepresented minority students.

Not Getting into One's Major of Choice

- Study the University of Michigan's undergraduate research program for underrepresented minority freshmen to learn whether there are aspects that can be replicated within UAA's Undergraduate Research Program.

- Create Major Interest Groups for first-quarter sophomores that function similarly to FIGs, are organized inside popular majors, focus more narrowly on topic areas in those majors, and require students to explore a sub-topic in those areas.

Specific Populations

- Hire an expert in multiracial identity issues to work jointly in OMA/D and UAA.

- Implement recommendations made previously regarding increasing enrollment of underrepresented minority students, forging closer connections and two-way communication with students' families and communities, including information about underrepresented groups in the undergraduate curriculum, clarifying academic expectations for families, and helping faculty, staff, and students understand how underrepresented minority students experience the climate at the UW.

- Gather specific information from underrepresented minority students who are considering leaving the UW or who have left the UW (third phase of the UW STAR) to increase our understanding of differences in the needs of students from different ethnic backgrounds, including the needs of multiracial students.

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The purpose of this report is to provide the University of Washington (UW) with results of a study on attrition and retention of underrepresented minority students, conducted by the Office of Educational Assessment (OEA) and the Office of Minority Affairs and Diversity (OMA/D). The goal of the study was to clarify and deepen the University's understanding of why underrepresented minority students might leave the UW before they graduate. In proposing this research, OMA/D and OEA hoped that information produced by the study would help the UW build on the intervention strategies it currently uses to foster academic success, both for underrepresented students and for others.

Increasingly, the literature on diversity suggests that student populations representing a variety of backgrounds add value to the learning of all students, positively affecting students' higher levels of complex thought and creativity, decision-making abilities, lifestyle choices, and work performance, among other things (Antonio et al., 2004; Hurtado et al., 1999). The UW recognizes the value to all of a rich, multicultural learning environment, as evidenced by President Mark Emmert's comments in a UW publication:

> *"To help the University of Washington reach even higher among the nation's foremost universities, we must continue to do all we can to create a diverse academic community. An educational experience that fails to expose students—majority and minority—to multicultural perspectives or that does not include interaction in a diverse community simply cannot measure up. All students leaving the University have to be able to take their places in the global village. We must continue to build a multicultural academic community because it is an inherent ingredient in an excellent education." (Emmert, 2004)*

However, because of the relative homogeneity of student and faculty populations at Washington colleges and universities, students attending those institutions may not be able to realize such benefits. According to a recent Washington State Higher Education Coordinating (HEC) Board report on diversity, minority student enrollment at Washington colleges and universities has been depressed since I-200 passed in 1998. Moreover, the report notes that only 4.6% of the faculty in public, four-year colleges and universities across the state are members of underrepresented minority groups, though about 15.9% of the state's population are members of these groups (Washington State Higher Education Coordinating Board, 2006). These patterns characterize the University of Washington as well as other post-secondary institutions within the state.

Exacerbating the lack of ethnic diversity caused by low enrollments are the higher attrition rates of underrepresented minority students relative to those of White and Asian American students, a pattern that has held true since at least 1985.[4] Although projections of retention rates for UW students suggest that rates for underrepresented minority students may converge with those for White and Asian American students over time, the high variability of enrollment numbers for

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[4] Data on enrollments and retention came from University of Washington Graduation and Attrition Rates, 2006 (http://www.washington.edu/admin/factbook/OisAcrobat/Freshmen%20Entering%20From%20High %20School.pdf).

underrepresented minority students, as well as stop-out[5] rates, makes the reliability of such projections questionable. For example, increases in overall underrepresented minority student enrollment since 1999, when I-200 took effect, can in part be attributed to significant increases in Latino enrollment, while enrollment of Black students remains lower than it was in 1984.

Furthermore, while projected retention rates can be seen as good news if fluctuations in enrollment and attrition rates are stabilized, so few underrepresented students enter the UW each year that the actual number of students of color remaining would still be small. In other words, even if the rates of retention for underrepresented minority students became identical to those of White and Asian American students, underrepresented minority students would still be underrepresented at the UW. As a result, the "critical mass" issue, discussed later in this report, would continue to pose problems for these students. As one faculty member noted:

> *"We bring in kids who have the intellectual capacity to succeed, and because the numbers are so small, each one is so precious. It makes a big difference if they are retained."*

We do not argue here or elsewhere that some students are more important to the UW than others. However, we acknowledge that the loss of a White student, while important to the UW, usually does not affect the capacity of other White students to succeed in the University environment. In contrast, a rich body of research, including our own conversations with UW students, staff, and faculty, suggests that the loss of a single Native American, Latino, or Black student can have profound effects on those few Native American, Latino, and Black students who remain (Hurtado et al., 1999).[6] Therefore, even if retention rates for all groups were identical, a study seeking to identify discernible patterns of loss among groups that are already underrepresented at the UW is critically important.

For this reason, the Office of Minority Affairs and Diversity (OMA/D) and the Office of Educational Assessment (OEA) proposed to the Provost a three-part study of retention of underrepresented

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[5] We intentionally use the term "stop-out" as opposed to others, because stop-out carries a less negative connotation than some, such as "drop-out." The term reminds us that students may leave the UW but pursue their academic or other aspirations elsewhere or at another time. Therefore, for the purposes of this study, "stop-outs" include both students who decided to leave the UW on their own and students who were asked to leave for any reason. Furthermore, we grouped students who left in good standing with those dropped for poor academic performance together in our analysis for two reasons. First, the variables in the UW student database do not allow us to distinguish reliably between these two groups. Second, students' GPAs are affected by a number of variables that are not easily tracked, such as campus climate. Therefore, differences in the experiences of students who leave on their own and those who are asked to leave are not readily revealed by attrition statistics. Furthermore, because the focus of our study was on attrition during the first two years of enrollment, we defined two types of stop-out students: (1) first-year stop-outs, that is, those students who stopped out within their first year at the University without receiving a degree; and (2) second-year stop-outs, which refers to those students who stopped out during their second year at the University without completing a degree. Students who maintained enrollment beyond their first two years are referred to as retained for the purposes of our analyses. The classification of students as first-year stop-out, second-year stop-out, or retained was based on the year of their entry, the number of incoming credits, the last year and quarter of their enrollment, as well as the number of completed credits as of the last quarter of their enrollment.

[6] In working with underrepresented groups on campus, we respect that different designations are acceptable to different groups when they are referring to themselves. At the same time, federal reporting requirements require data collection using specific terms. In this document, we use the term "underrepresented minority students" to refer to Black, Latino/Latina, Native American and Hawaiian/Pacific Islander students. We abbreviate the latter to Pacific Islander. We use Latino to refer to all Latino/Latina students. The term "students of color" includes Asian Americans and other ethnicities of color. We use Black and African American, and White and Caucasian, interchangeably. We also use multiracial and multiethnic interchangeably.

minority UW students, the UW Study of Attrition and Retention (UW STAR). The three parts of the proposed study were:

- A comparative analysis of existing data on students who entered the UW from 1999 through 2003 and left before graduation
- An analysis of semi-structured conversations with faculty, staff, and student groups engaged in work with underrepresented students
- An analysis of interviews with students who left the UW before graduation or who were at risk of leaving

In late spring 2006, OMA/D and OEA received funding from the Provost's Office to conduct the first two parts of the study. This report presents our findings.

This section provides a review of the literature, a summary of the national and regional data on underrepresented minority attrition and retention, and an overview of the UW that includes both a preliminary summary of UW attrition and a list of organizations and programs at the UW that work on retention.

REVIEW OF THE LITERATURE

What causes underrepresented students to have higher attrition rates than others in their second year at the UW—the year when most students are settling into majors and beginning the academic paths that will lead them to careers after college? How can we better understand the factors in our climate that may contribute to underrepresented students' decisions to drop out? For answers in the literature to these questions, we look first at the research on retention of all students in general, and then to specific studies of the experiences of underrepresented minorities.

All Students

Literature on college student retention suggests that many factors contribute to a student's decision to stop out of college. For example, Tinto (1993) pointed out the following risk factors for attrition:

- Attending school part time
- Having lower test scores or high school rank than others
- Being African American, Latino, or Native American
- Stopping out of college at some point
- Living off campus
- Working more than 20 hours per week
- Not participating in campus activities
- Attending a college that was not the student's first choice
- Being turned down for a program or major
- Receiving loans rather than grants (educational debt)

We note that in Tinto's list of ten risk factors, nine can be seen as "causes" that may have alternatives and one is a status—"being African American, Latino, or Native American."

Both Astin (1977, 1984, 1993) and Tinto (1975, 1987, 1993) argued that students' level of involvement and integration into the academic and social systems of institutions of higher education were strongly correlated with whether students decided to stay or leave an institution.[7] Tinto (1993) argued that a personal connection with any faculty or staff member at institutions of higher education was a powerful incentive for students to remain in school. In addition, Pascarella and Terenzini (1991) suggested that supportive student personnel services, such as advising, orientation,

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[7] A recent article in the *Chronicle of Higher Education* reported on a study conducted by Regina Deil-Amen at Pennsylvania State University that found that these same factors influenced community college students' reasons for remaining in school. (D. Glenn, Community-college students' reasons for dropping out are familiar ones, study finds, *Chronicle of Higher Education*, August 17, 2005.)

and academic support programs, are positively correlated with student persistence and degree attainment.

In contrast with Astin and Tinto's findings pointing to the importance of meaningful connections to others in preventing attrition and with Pascarella and Terenzini's findings on the importance of student activities, Mohammadi (1994) examined the influence of aspects of individuals' backgrounds on attrition. He focused on variables such as students' low-level degree goals, lack of financial resources, poor study habits, and full-time employment. Mohammadi found that students whose parents had lower level educations were more likely to drop out of college than were other students.

Looking even more broadly at influences on attrition, Upcraft, Mullendore, and Fidler (1994) suggested that the following four areas affected the success of students in college:

- Personal characteristics (motivation, previous achievement, and intellectual ability)
- Demographic characteristics (age, gender, and race)
- Cultural characteristics (ethnic background and socioeconomic status)
- Institutional characteristics (campus site, regional location, selectivity, curriculum, and enrollment)

To summarize, many factors that students bring to college when they enter (their ethnicity, academic preparedness, and socioeconomic status, for example), as well as their behaviors while in college (such as whether and with whom they forge meaningful connections), affect attrition. Furthermore, it is likely that these factors influence each other. Students who are less well-prepared academically may be less likely than others to "make connections" with University faculty and staff. The literature also suggests that variables that are external to the student, such as the characteristics of the institutions themselves (campus site, regional location, selectivity, curriculum, and enrollment) influence student retention, and these characteristics may also interact with others in ways we do not yet understand.

Underrepresented Minority Students

Many of the above mentioned factors also play a role in the decisions of underrepresented minority students to leave college. However, research suggest that additional factors such as campus climate, academic performance, financial hardship, family background, as well as campus involvement may play a more significant role in the retention of minority students than it does for White students.

Campus Climate and Students' Experiences

Sylvia Hurtado and her colleagues (1998, 1999) focused on the influence of campus climate on the outcomes of minority students. Hurtado pointed out four aspects of campus climate that affect the experiences, and possibly retention of, underrepresented minority students in college. These dimensions include the institution's historical legacy of exclusion of various groups, its structural diversity being the numerical representation of people of color on campus, the psychological dimension which includes the perceptions and attitudes between and among different ethnic groups, and the behavioral dimension focusing on the intergroup relations on campus. Hurtado emphasized that if institutions are to create a positive welcoming campus climate, the interconnectedness of all aspects of climate must be understood and addressed. Simply having a large number of minority

students on campus will not ensure that the psychological climate on campus is supportive and welcoming for students of color. Thus, to help recruit and retain underrepresented minority students, institutions must commit to addressing all aspects of campus climate and ensure a welcoming and supportive environment where all students can succeed.

Also looking at aspects of campus climate, Daniel Solorzano (2000) studied the effects of "racial microaggression" on the experiences of African American students on a predominantly White campus. Racial microaggressions, first defined by Chester Pierce (1974), are visual, verbal, or nonverbal insults—often subtle and sometimes unconscious—directed toward people of color. Solorzano points out that many underrepresented minority students are carrying the cumulative burden of a lifetime of microaggressions into any new situation. Solorzano notes that racial microaggressions take a variety of forms on college campuses, including negative assumptions and expectations that are communicated to students by faculty or peers, being ignored when speaking in class, rude treatment by roommates in and out of the residence halls, and being excluded when groups are forming in class or for study purposes outside class. A lifetime of contending with racial microaggressions leads students to constantly evaluate their interactions with others and question the motivation of others' behavior. At the least, this need to interpret others' behaviors and comments is distracting. At the worst, it causes minority students psychological stress, exacerbating students' sense that they do not belong and discouraging their desire to deal with a predominantly White campus environment.

Research on minority retention often focuses on the racial hardships minority students face when attending predominantly White colleges and universities, noting that the key challenges facing minority students include being underrepresented and feeling alienated (Brown, 2000; Schwitzer et al., 1999). Tinto (1987) suggested that a sense of separation pervades Black students' perceptions of predominantly White institutions, and that this feeling of separation contributes to dissatisfaction and increased attrition. Harris and Kayes (1996) argued that a lower level of retention for minority students was due partially to their transition and adjustment to Eurocentric college environments that expected students to assimilate into a dominant (Eurocentric) culture. They pointed out that this culture was often very different from underrepresented students' own cultures and communities. They further argued that the problem with this expectation, and the reason minority students leave an institution, was that colleges often put the burden of change on the students—expecting them to assimilate into the culture while doing little to make the culture more welcoming and supportive for the students.

Laura Rendón (1994) agreed with this perspective, suggesting that two factors affected minority student retention. The first was that students could have difficulty making connections in an institution that they perceived to be racially exclusive. Obviously such difficulty would have a bearing on Astin's (1987) and Tinto's (1993) findings regarding the importance to retention of students making a significant connection with a faculty or staff member at their colleges and universities.

Other factors Rendón (1994) identified included barriers such as low socioeconomic status, poor academic preparation, and lack of clear career goals. Rendón pointed out that the first factor was often particularly difficult for students who were the first in their families to attend college, and many minority students are in this position. According to Rendón, such a position—being underrepresented and first in one's family to attend school—forced students to navigate multiple identities, asking them to fit in with family members and old friends who mattered to them at the same time they were being asked to establish themselves in a new educational system.

Pre-College Experience

While some scholars look to high school GPAs and SAT scores as predictors of college success, there is a great deal of debate about the accuracy of such factors in predicting college success (Cameron & Heckman, 2001; Rothstein, 2004; Sedlacek, 2004). Sedlacek (2004) emphasized the importance of noncognitive variables on the success of students of color, offering evidence that the SAT and other standardized test scores are as not as good at predicting the success of students of color as they are for White students. Instead, Sedlacek suggests using standardized test scores in conjunction with noncognitive variables to predict the success and retention of underrepresented minority students. The noncognitive variables Sedlacek uses include: (1) positive self concept, (2) realistic self appraisal, (3) successfully handling the system (racism), (4) preference for long term goals, (5) availability of a strong support person, (6) leadership experience, (7) community involvement, and (8) knowledge acquired in a field. Sedlacek's research on the effectiveness of using noncognitive variables to measure the success and retention of students of color has shown the factors to be good predictors of the success of both underrepresented minority students and White students (2004).

Also noting that many factors contribute to students' academic performance, Claude Steele (1997) focused on the ways in which "stereotype threat" impacts the work of students of color. Steele defined stereotype threat as the "social-psychological threat that arises when one is in a situation of doing something for which a negative stereotype about one's group arises" (p. 614). In his study about the ways stereotype threat affects Black students during a standardized test, Steele and his colleagues concluded that awareness of a racial stereotype was enough to depress the performance of Black students (Steele & Aronson, 1995). Steele connected his theory of stereotype threat to Cross's (1991) theory of "spotlight anxiety" in which individuals are judged or treated in terms of racial stereotypes. For example, a Black student may feel that he "stands out" in a class full of White and Asian American students and being conscious of the stereotypes about Black people, he may be apprehensive to ask a question in class for fear of being perceived as fulfilling the negative stereotype. Steele also argued that often students of color attempt to dissociate themselves from these stereotypes by distancing themselves from things associated with their stereotyped race, which may in turn prove detrimental to their well-being and sense of belonging as one of few minority students on campus (1997).

Regarding the ways in which various schools prepare students for the college environment and college level work, researchers have cited the inequity of high schools as a reason for the differential preparation of students for college (Kozol, 1992; Darling-Hammond, 1995). It has been well documented that students in high schools in more affluent, predominantly White neighborhoods tend to have more access to resources that prepare students both socially and academically for the university environment, which also tends to be predominantly white. Underrepresented minority students may have a difficult time adjusting to such environments and are also dealing with the issues mentioned above, which in turn may affect their decisions to leave higher education.

Campus Involvement

Consistent with Pascarella and Terenzini's (1991) findings, research on minority student retention found that involvement in nonacademic activities also correlates with success and retention. Hoffman (2002) found that co-curricular involvement had a strong positive correlation with academic achievement and retention. Similarly, Stoecker, Pascarella, and Wolfle (1988) found that social or leadership involvement in college had a significantly more positive influence on the baccalaureate degree attainment for Black men then it did for White men.

Rendón (1994) supported Astin's (1984) theory of involvement, but pointed out that some students have a harder time getting involved than others. For example, students who had disconfirming experiences prior to enrollment, students who lacked direction, students who felt lost in the new college environment, and students who were academically and psychologically under-prepared for college could have a harder time getting involved with college activities, faculty, and staff than did others. Rendón asserted that merely offering involvement opportunities was not enough, but that institutions need to be proactive, finding ways to reach out and enable minority students to become involved.

Multiracial Students

An emerging area of research focuses on the experiences of multiracial students in college. Because of the increasing number of students who identify as multiracial on college campuses, along with the new ways institutions collect data on students' race and ethnicity, this research is important and can help shed light on the complexity of race and the experiences of students of color. Some researchers (Renn, 2004; Knaus, 2002) have examined the identity development and experiences of multiracial students, but little research has been conducted specifically on the retention of multiracial students in higher education. Research on the retention of students of color suggests that racial identity plays a role in their college experiences and retention (Cross, 1991; Hurtado et al., 1999; Steele, 1997; Tatum, 1997). Because the identity development process of multiracial students may be more complex than those of their monoracial counterparts, a deeper understanding of how identity affects the experiences of multiracial students and their retention in college would prove valuable.

Summary of the Literature

Taken together, one can see that a large number of complex issues affect the retention of all students. However, underrepresented minority students have to contend with additional circumstances that often affect their retention. They are dealing with a climate that may be unwelcoming and, therefore, with the sense that they do not belong at the University. These two aspects of underrepresented minority students' college experience may reduce involvement with campus activities, as well as limit connections with college faculty and staff. In addition, stereotypes and racism may cause psychological stress, which can affect students' academic performance, as can family and financial issues that may take students away from their studies. Multiracial students may have unique challenges that contribute to their retention patterns. However, to fully understand challenges related to retention of multiracial students, further research is needed.

NATIONAL AND REGIONAL TRENDS

National and regional data shed light on current trends in higher education with regard to students' academic backgrounds, performance, and expectations; socio-economic backgrounds and student financial aid status; as well as activities and obligations outside class. This section provides a brief summary of a study[8] OEA conducted in October 2006, which examined several trends related to

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[8] See http://www.washington.edu/oea/pdfs/reports/OEAReport0608.pdf.

University of Washington Study of Attrition and Retention (UW STAR)

retention from data collected on institutional and student characteristics by the National Center of Educational Statistics (NCES) during the 2003-2004 school year, as part of the 2004 National Postsecondary Student Aid Study (NPSAS:04). This section is intended to provide a national and regional context for the UW findings on attrition. Many of these trends are confirmed by other findings in this report, and we point out those connections when appropriate.

Institutional Characteristics and College Experience

At the national level, the majority of students, across most ethnic groups, attended an institution that the NPSAS:04 determined was either *moderately selective* (61%) or *very selective* (23%).[9] However, Asian American students tended to enroll at *very selective* (37%) and *most selective* schools (12%) at a much higher rate than any of the ethnicity groups. The same is true in the far west region where close to one-fourth of the Asian American students (22%) attend some of the most selective institutions in the region. In contrast, Native American students typically attended either *minimally selective* (49%) or *moderately selective* (41%) institutions.

Two-thirds of the students enrolled at four-year public institutions attended institutions in either *mid-sized* (having a population less than 250,000) or *large cities* (having a population greater than or equal to 250,000). At the regional level, these students made up an even higher 83%. Asian American students enrolled in institutions farthest from their homes at both the national (522 miles) and regional levels (438 miles), and were more likely than any other group (at both levels) to attend college in a *large city*. In contrast, more than two-thirds of Native American students attended institutions in a *town* (population around 25,000). Overall, both nationally and regionally a higher percentage of students reported living off campus than on campus or with parents. Nationally, among all students, a higher percentage of African American students reported living on campus and a higher percentage of Native American students lived off campus. Latino and "other" students more often reported living with their parents than did other students. Regionally, Asian American students more often reported living on campus or with their parents, and African American students most often reported living off campus.

While the overall majority of students attended college full-time at both the national and the regional levels, a higher percentage of Black and Latino students, as well as multiracial students, attended school exclusively part-time, compared with White and Asian American students.

Risk for Attrition

Consistent with the literature on retention and attrition, as well as with our own UW data, analysis of national and far-west regional data showed that underrepresented minority students were more likely than White and Asian American students to be at risk for attrition. The NPSAS:04 reported a risk index consisting of the sum of seven characteristics thought to affect persistence. These characteristics were:

- Delaying enrollment

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[9] NCES defines selectivity from a combination of variables from the Institutional Characteristics survey. Open admission 4-year institutions were formed into a separate category. For non-open admission institutions, an index was created from two variables: a) the centile distribution of the percentage of students who were admitted to each institution (of those who applied); and b) the centile distribution of the midpoint between the 25th and 75th percentile SAT/ACT combined scores reported by each institution.

- Not receiving a high school diploma
- Enrolling in college part-time
- Being financially independent
- Having dependents
- Being a single parent
- Working full-time while enrolled

Note that these characteristics do not take noncognitive variables into account (Sedlacek, 2004).

Using this index, we found that Asian American students—at least nationally—were the least at risk, with the majority (81%) having only one or two of the seven risk indicators. Conversely, two out of five Black students (41%) had three or more risk factors, appearing to be most at risk of attrition.

Academic Performance

National and regional data suggested that there were differences in the preparedness of students for college work. At the national level, the percentage of students who took remedial courses was higher among Pacific Islander (39%), Black (35%), and Native American (33%) students than among White (24%), Asian American (26%), and multiracial (23%) students. However, the data did not provide insights into what might cause differences in college readiness, nor did it make clear distinctions about the kinds of remediation determined to be necessary.

In addition, the national and far-west regional data suggested that underrepresented minority students earned slightly lower GPAs in college (ranging from 2.7-2.8) than did White and Asian American students (about 3.0).

Family Background

National and regional data showed that the percentage of students in divorced/separated households was much higher among Black (27%), Native American (25%), Latino (22%), and multiracial students (22%), than among White (17%), Asian American (11%), and Pacific Islander students (8%). At both national and regional levels, most students' parents had bachelor's degrees, with the exception of parents of Black and Latino students, whose parents were more likely to have a high school diploma or the equivalent.

Financial Issues

At the national level, Black students had the highest financial aid application rate (90%), the highest average amount of aid awarded ($10,015), and the highest ratio of aid to budget (70%). The lowest application rates were among White (75%), Asian American (75%), and "other" students (75%), and these students also had some of the lowest ratio of aid to student budget (about 55%).

In addition, national data showed that the average amount of total loans that students took out during the 2003-2004 academic year was higher among Black ($6,147) and White ($5,826) students than among Latino ($5,049), Asian American ($5,177), and Native American students ($5,331).

Regarding financial help from parents, national data showed that a higher percentage of Native Hawaiian and Asian American students received help from their parents to pay tuition and fees (58% and 48%), while a smaller proportion of Black (29%) and Native American (27%) students received such help.

Finally, the data showed that Latino and Native American students tended to spend more time than White and Asian American students at work. Black and Latino students were more likely than other groups to cite college tuition, fees, or living expenses as their primary reason for working and to deem their work as having a negative impact on their grades.

OVERVIEW OF THE INSTITUTION

Founded in 1861, the University of Washington is a four-year public, research university located in Seattle, Washington, with additional branch campuses in Bothell and Tacoma, Washington. The main campus in Seattle has seventeen major schools and colleges, including law and medical schools, and offers a wide range of academic majors. The UW Seattle campus has approximately 39,000 students and 27,000 faulty and staff.

With its focus on widening the participation of individuals from diverse backgrounds and experiences, the UW believes that such an approach will yield a student body that is reflective of the State's demographic and social make-up. As President Mark Emmert argues, "To help the University of Washington reach even higher among the nation's foremost universities, we must continue to do all we can to create a diverse academic community." Equally important, it will also produce an institution that is strategically positioned to tap the full range of energy, creativity, and critical thinking from diverse voices and perspectives that will help the University create new knowledge and bring new discoveries to the forefront. This social and geographic milieu will serve as the backdrop for one of the most unique campus environments in the country.

Student Demographics

Of the 39,542 students enrolled at the UW in fall 2006 about 27,836 are undergraduates. As Table 1 shows, approximately 26% of the undergraduates are Asian American; 3% are African American; 52% are Caucasian; 5% are Latino; 1% are Native American; less than 1% Pacific Islander; 9% did not indicate their ethnicity; and 3% are international. Nearly 52% are women, and about 50% of students receive some type of financial aid. Admission to the University is highly competitive. The 2006 entering freshman class had an average high school GPA of 3.67 and an average SAT 1 combined score of 1187.

Table 1: UW undergraduate demographics 2006-07

Gender		Ethnicity	
Male	48.2%	African American	3.1%
Female	51.8%	Native American	1.2%
		Latino	4.7%
Financial aid	50.0%	Pacific Islander	0.6%
		Asian American	25.7%
Average Age	21	Caucasian	52.0%
		Not Indicated	9.3%
		International	3.4%

Faculty and Staff Demographics

As shown in Table 2, as of fall quarter 2006, the University of Washington had a total of 7,231 faculty[10] and academic personnel, 6,759 professional staff members, and 12,594 classified staff members. The majority (60%) of the 7,231 faculty/academic personnel are males, and only 5% are underrepresented minorities. Professional and classified staff at the UW are more diverse. Of the 6,759 professional staff members, 58% are female and 7% are underrepresented minorities. Sixty-nine percent of the 12,594 classified employees are females and 16% are underrepresented minorities.

Table 2: UW faculty and staff demographics 2006-07

	Faculty% (n=7231)	Prof Staff% (n=6759)	Class Staff% (n=12594)
Gender			
Male	60	42	31
Female	40	58	69
Ethnicity			
African American	2	3	9
Native American	0	1	1
Latino	3	3	6
Pacific Islander[11]	NA	NA	NA
Asian American	17	11	22
Caucasian	78	81	63

Preliminary Data on Retention Trends

A preliminary examination of data on attrition for all freshmen entering the UW between 1999-2002 drawn from the UW Student Database showed that underrepresented minority students exhibited a much higher rate of attrition both incrementally (year 1 to year 2, and year 2 to year 3), and cumulatively (overall attrition rate after year 2) than did either Asian American or White students. Additionally, patterns of attrition for the various groups suggested that factors influencing students' decisions regarding school enrollment may differ by group. Just as we found different patterns of incremental attrition among Asian American, White, and underrepresented minority students, so were there different patterns among the various underrepresented minority groups.

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[10]   Faculty refers to both tenure- and non-tenure faculty, as well as librarians.

[11]   Pacific Islanders are included in Asian category.

These preliminary findings suggested that not all students face identical challenges in remaining in school and an increased understanding of patterns of attrition by student group may improve our ability to create retention programs for all students, and particularly to create programs to serve underrepresented minority students. As noted at the beginning of this report, the importance of increasing our understanding of these reasons goes beyond the needs of the underrepresented minority students themselves, because retention of underrepresented minority students affects the learning environment of all students who remain, as well as the lives of those who leave (Hurtado et al., 1999).[12]

Campus Climate Surveys

Results from two surveys of UW's campus climate provide further evidence of the need for a study on retention. OEA collaborated with others on our campus to conduct climate surveys in 1999[13] and 2000,[14] both of which found significant differences in responses of minority and White students. In 1999, OEA reported that:

> *"Small but nevertheless significant differences were found among ethnic groups with respect to their degree of satisfaction with the UW campus climate and their exposure to racism. In general, minority students reported somewhat less agreement with positive descriptions of the climate than did White students, and somewhat more agreement with negative statements….They also reported a greater exposure to racism. These differences were largest for African American students…."*

The 2000 survey provided further evidence that the UW climate may differ for people from various ethnic groups. Results from this survey found "small but significant differences between white and minority students with respect to their degree of satisfaction with the UW campus climate and their exposure to racism . . . . In general, minority students reported more (but still low) exposure to racism and a higher degree of interest in diversity-related matters than their majority peers."

UW Retention Programs

The University of Washington has many programs designed to help retain underrepresented minority students. Below is a list and brief description of some of these programs.[15]

Business Educational Opportunity Program (BEOP): The Business Educational Opportunity Program (BEOP) is dedicated to helping underrepresented students achieve success in the UW Business School. BEOP provides assistance with admission, scholarships, academic advising, and tutoring services.

Educational Opportunity Program (EOP): The EOP is a student services program primarily for underrepresented ethnic minority, economically and educationally disadvantaged (first generation)

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[12] Studies on attitudes toward higher education have shown that middle-aged people from minority groups value higher education as the path toward equity more than other groups do.

[13] See http://www.washington.edu/oea/pdfs/reports/OEAReport9919.pdf.

[14] See http://www.washington.edu/oea/pdfs/reports/OEAReport0101.pdf.

[15] Adapted from 2004 Comprehensive List of Climate and Retention Programs.

students. Students are also admitted on a racially neutral basis.   EOP's purpose is to provide educational opportunity and to create greater cultural diversity within the University.

Ethnic Cultural Center and Theatre (ECC/T): The UW Ethnic Cultural Center and Theatre promotes the academic, cultural, recreational, and social needs of minority and majority students, staff, and faculty. The ECC/T is a place where all UW students can meet while developing leadership and organizational skills.

Health Sciences Center Minority Student Program (HCS-MSP): HCS-MSP supports high school through professional/graduate school students in fulfilling their career goals through innovative support programming and academic counseling.

Instructional Center (IC): The IC provides comprehensive academic support to students to help them succeed in their chosen majors. The services include instructional support in majors, tutoring and mentoring, test preparation, skills building, and computer access.

Partnership for Cultural Diversity (PCD): PCD addresses issues of diversity within the Evans School of Public Affairs and the larger university community. PCD focuses on recruitment and retention of students of color; funding and financial aid; diversification of faculty; faculty/staff involvement; and support systems and diversity awareness.

Student Support Services (SSS): SSS provides instructional and counseling services to students from the inner city, small town, rural, or reservation communities in the Northwest. The primary goal of this program is to increase the academic success and number of matriculating SSS students and to foster a supportive climate at the UW.

UW Women's Center: The Women's Center is a vital place where women and men partner to build a culture of social justice, equity, and non-violence, both domestically and globally. Programs offered include educational programs, advising, counseling, life skills training, and encouraging positive change in public policy.

This section presents information about the three sources from which we drew data on attrition: the UW student database (student academic and demographic information); records from the UW's Student Financial Aid Office; and conversations with faculty, staff, and students. We also include analysis of data on national and regional retention available from the National Center of Educational Statistics (NCES), as cited earlier.

There is currently a debate in the literature regarding the relative importance of student demographic and financial aid variables in studying academic persistence as compared to other, noncognitive variables (Tracey & Sedlacek, 1987; Sedlacek, 2004). Researchers on retention have gathered evidence that students' scores on instruments such as the Noncognitive Questionnaire (NCQ) can predict grades, retention, and college completion for both Black and White students (Sedlacek, 2004). The UW does not routinely collect this type of information, so we could not include it in this study, but it is a promising area for further study.

UW STUDENT DATABASE

In May and July 2006, working with a list of variables generated by OMA/D, OEA researchers extracted data from the UW student database on all freshmen who entered the UW during fall quarter between 1999 and 2003. We combined the freshmen cohorts from these five years in order to raise the number of underrepresented students to levels high enough to permit comparisons across specific ethnic groups. Students who entered the UW during these years with 45 credits or more were defined as transfer students and excluded from the analyses. In addition, we excluded students under the age of 18 because of Institutional Review Board regulations on use of subjects younger than 18 years old. A complete description of the study cohorts is included in Appendix A. A description of how we re-categorized students' minority status and ethnicity is included as Appendix B.

Table 3 shows the ethnic breakdown for the study population. Roughly 6% were single race underrepresented minority students, such as Black (1.8%), Latino (1.9%), Native American (0.9%), and Pacific Islander (0.5%). Another 2.1% were mixed underrepresented minority students, defined as students whose ethnicities included one or two ethnicities considered underrepresented at the UW. Mixed, non-underrepresented minority students made up 3.5% of the cohorts, and 0.3% had three or more ethnicities. The majority of students (54.3%) were White, and 22.5% were Asian American.

We extracted a number of variables for this sample from the UW Student Database, including gender, high school grade point averages (GPAs), and cumulative UW GPAs as of their last quarter of enrollment. Then, we analyzed the UW data in two ways. First, we combined the five cohorts of incoming freshmen (those entering between 1999 and 2003) to ascertain the rates at which different ethnic groups left the University before degree completion. In this analysis, we looked at:

- Minority status and ethnicity
- Gender
- Residency
- Special program affiliation

Table 3: Study population

	1999		2000		2001		2002		2003		All	
	N	%	N	%	N	%	N	%	N	%	N	%
Asian American	779	20.2	922	21.8	1056	22.2	998	23.2	1073	24.9	4,828	22.5
Black	55	1.4	88	2.1	81	1.7	83	1.9	77	1.8	384	1.8
Latino	60	1.6	69	1.6	92	1.9	107	2.5	87	2.0	415	1.9
Native American	33	.9	40	.9	34	.7	51	1.2	37	.9	195	0.9
Pacific Islander	9	.2	17	.4	21	.4	20	.5	30	.7	97	0.5
White	2,114	54.8	2,350	55.6	2,433	51.2	2,371	55.1	2,370	54.9	11,638	54.3
Unknown[16]	586	15.2	521	12.3	762	16.0	424	9.9	341	7.9	2,634	12.3
Mixed: URM Ethnicities	71	1.8	66	1.6	99	2.1	109	2.5	110	2.5	455	2.1
Mixed: Non-URM Ethnicities	138	3.6	143	3.4	159	3.3	127	3.0	183	4.2	750	3.5
Three or more ethnicities	10	.3	9	.2	16	.3	11	.3	8	.2	54	0.3
Total	3,855	100.0	4,225	100.0	4,753	100.0	4,301	100.0	4,316	100.0	21,450	100.0

Second, in order to determine what the existing data could tell us about students who left the UW, we profiled the stop-outs by making a series of comparisons across minority and stop-out statuses of underrepresented minority students who left the UW during their first or second year with:

- Underrepresented minority students who stayed beyond their first two years
- White students who left during their first two years
- White students who were retained
- Asian American students who left during their first two years
- Asian American students who were retained

In this second set of analyses, we compared the student groups on the following variables obtained via the UW student database:

- Gender
- High school grade point averages
- SAT test scores (math, verbal, and combined)
- UW grade point averages

A common motivation in educational research is to infer something about the characteristics of an unobserved population, such as all incoming freshmen between 1999 and 2003, based on an observed sample of these students—for example, a random sample of incoming freshmen in this time period. The aim is often to compare across multiple subpopulations (e.g., as defined by ethnicity, minority status, or both) and identify significant differences between these groups. In doing so, statistical significance tests are commonly used as a systematic way to assess whether observed differences in the subsample are likely to reflect *actual* or *real* differences in the population from which the sample was drawn. Because our analyses of the UW data were based on the entire population of interest, rather than on a subsample, any observed difference constitutes an actual difference in the

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[16] A recent study entitled *"Unknown" Students on College Campuses* (James Irvine Foundation, December, 2005) found that most of the students who choose "unknown" or "other" for their ethnicity or leave the space empty were Caucasian students (see http://www.irvine.org/publications/by_topic/education.shtml).

population. Thus, we chose to rely on practical significance rather than statistical significance for the purpose of this study.

UW FINANCIAL AID DATA

We extracted variables on socioeconomic and financial aid status with support and supervision from the Student Financial Aid Office in August 2006. We were able to use these data to compare the underrepresented, White, and Asian American groups who stopped out and who were retained on the following variables:

- Parents' marital status and educational attainment
- Students' financial aid status
- Students' emergency loan patterns

Our study of data from financial aid had some limitations. First, student financial aid records are maintained for a limited time, depending on the students' enrollment and on their status as student financial aid recipients. Financial aid records for students who enroll at the University and apply for aid but do not get aid are maintained for four years beyond the end of the year of these students' financial aid applications. In contrast, the records for students who enroll at the University and receive financial aid are maintained for five years after the last academic year in which these students enrolled. As a result, data on all of the five cohorts in our study were unavailable, and we chose to focus on incoming students in the two cohorts of 2001 and 2002.

Second, because our analyses include only those students who applied for student financial aid, our financial aid population is considerably smaller than the population from which we were able to extract demographic and academic data. In fact, students who were listed in the student financial aid database as having applied for aid made up around 64% of the two cohorts during their first year at the University and an even lower 51% during their second year.[17] Accordingly, our ability to carry out detailed comparisons by ethnicity was limited.

Finally, regarding our analysis of students' financial aid status, our goals were modest. We aimed to highlight particularly salient financial aid factors related to first- and second-year attrition. A comprehensive examination of student financial aid and its impact on student attrition and retention would be valuable, but it was beyond the scope of the present project. Such an examination would require interviews with underrepresented students who left the UW—the proposed third phase of the UW STAR.

FACULTY, STAFF, AND STUDENT CONVERSATIONS

In May 2006, researchers in OEA contacted 60 faculty and staff members identified by OMA/D as having had extensive contact with or knowledge about underrepresented minority students. We invited them to speak with us about their views on the retention of these groups of students. In the next two months, we spoke with the 40 faculty and staff members who responded (two-thirds of those whom we contacted) in individual or small-group conversations. Faculty and staff members came from a range of offices and disciplines, including the OMA/D, UAA, and academic departments

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[17]   These rates are somewhat lower than the national average for 2003-2004 at 78% (Table 12A in Appendix A.) Note that national rates include federal aid applicants, as well as applicants for other forms of aid.

in the sciences, humanities, social sciences, business, engineering, health sciences, and education. Most of them were familiar with the literature on underrepresented minority student retention and had personal experience with students who had gone through decision-making processes regarding retention.

In addition to faculty and staff members, OEA researchers spoke with 29 underrepresented minority students in eight focus groups in order to learn their perspectives on retention. Because most of these students were leaders in their communities and/or active participants in student organizations, they may not be representative of the entire underrepresented minority population at the UW, nor do they represent students who had left or might leave the UW. Nonetheless, their perspectives provided insight into students' thinking on the issue of retention.

Conversations with faculty, staff, and students were semi-structured; the questions we addressed are included as Appendix C. One OEA researcher facilitated the discussions and another took notes. We analyzed the notes using an inductive process, identifying themes as they emerged from the comments and then counting the number of times those themes arose. We also preserved idiosyncratic responses. This process, sometimes called the constant comparison method, requires us to focus on the respondents' own words, rather than being guided by previous research or by our own memories of repeating themes. However, it should be noted that the views of those with whom we spoke may not represent the views of all faculty and staff who work with underrepresented students.

This section on findings is divided into five subsections. First, we present results of our analysis of UW demographic information about students entering the UW from 1999 through 2003 who left the UW in their first two years. Second, we discuss why underrepresented minority students might have left the UW during this time based on conversations with students, faculty, and staff and analysis of existing data. Third, we note connections between the experiences of underrepresented minority students and those of underrepresented minority faculty and staff. Fourth, we present factors that help to retain students. Fifth, we report what faculty, staff, and students said about differences among underrepresented groups. Finally, we present the suggestions for improving retention of underrepresented minority students put forward by the faculty, staff, and students whom we interviewed.

WHO LEFT THE UW FROM 1999 THROUGH 2003?

The following section provides an overview of first- and second-year attrition rates among incoming freshman from 1999 through 2003, with particular attention to underrepresented minority students.

Our data on attrition rates give us a broad idea of who is leaving the UW. However, it is important to note that while retention is typically described by attrition rates, comparisons of these rates in subpopulations may prove problematic for several reasons. Comparing small populations whose numbers fluctuate quite a bit with larger populations whose numbers are relatively stable and predictable does not allow us to draw conclusions with a great deal of confidence. Such comparisons ignore the potential impact of attrition, which, as noted earlier, may differ across populations. For example, a 20% attrition rate in a population of 11,638 White students is not likely to have the same effect on White students who are retained that an identical 20% attrition rate among a Black student population of 387 will have on the Black students who are retained.

Attrition rates can be somewhat difficult to interpret, as they represent all the students who left the University before degree completion. For purposes of our study, we considered students to be stop-outs if they left the UW within the first two years of their enrollment and failed to return by spring quarter 2006. We could not tell if those students left post-secondary education forever, transferred to other two- or four-year schools, or might return at some later date to continue their educations. This is why we have designated students who left the UW as "stop-outs" rather than the more pejorative "drop-outs." [18]

Ethnicity

Table 4 provides a breakdown of the first- and second-year attrition rates, as well as of the two-year retention rates, by minority status and ethnicity. [19] Between 1999 and 2003, 21,450 students entered the UW as freshmen. Of these, a total of 1,458 left the University within one year of enrolling, with

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[18]   In our conversations with faculty, staff, and students, several staff members noted that the UW should track enrollment patterns of underrepresented students for ten years, rather than the usual six or seven, to get an accurate picture of underrepresented minority attrition.

[19]   In this table, multiracial students whose backgrounds include underrepresented groups are included in the "Underrepresented minority" or URM category.

another 1,237 leaving in the second year. Underrepresented minority students stopped out at higher rates both during their first and their second years (8.8% and 8.1%, respectively) than did White (7.4% and 6.0%) or Asian American students (4.5% and 4.4%), a finding consistent with the national and regional data on retention, described in the "Background" section of this report.

In addition to showing that the percentage of incoming freshmen who were retained beyond their first two years at the UW was highest among Asian American students (91.1%), the detailed breakdown by ethnicity in Table 4 shows that Black/ Asian American students also had high retention rates (89.5%), with Black students and White students both displaying two-year retention rates at about 85.0%. Table 4 also shows that Native American and multiracial Native American students had the lowest retention rates at 77.4% and 76.7%, respectively. The two-year retention rate was relatively low for Latinos (84.5%), White/Latinos (81.2%), Asian American /Latinos (81.6%), and students having three or more ethnicities (79.6%).

In order to determine whether a multiracial student's ethnic background was related to retention, we compared multiracial students whose backgrounds included underrepresented minority ethnicities with those whose backgrounds did not. There appeared to be a higher retention rate for students whose multiracial status did *not* include underrepresented groups (87.5%) than for those whose status included such groups (82.9%). Students whose multiracial status did not include underrepresented groups had retention rates similar to those of White and Asian American students.

Table 4. Attrition rates by ethnicity

	Stop-out: First year		Stop-out: Second year		Retained		
	Count	Row %	Count	Row %	Count	Row %	Total
URM	141	8.8	129	8.1	1,330	83.1	1,600
Black	25	6.5	33	8.5	329	85.0	387
Latino	38	8.9	28	6.6	359	84.5	425
Native American	19	9.7	25	12.8	151	77.4	195
Pacific Islander	12	10.3	5	4.3	99	85.3	116
Mixed – URM	41	9.7	33	7.8	349	82.5	423
White/Black	5	5.8	7	8.1	74	86.1	86
White/Latino	23	10.6	18	8.3	177	81.2	218
Asian Amer/Black	2	5.3	2	5.3	34	89.5	38
Asian Amer/Latino	6	15.8	1	2.6	31	81.6	38
Native American/Other	5	11.6	5	11.6	33	76.7	43
Three or more ethnicities	6	11.1	5	9.3	43	79.6	54
White	862	7.4	703	6.0	10,073	86.6	11,638
Asian American	217	4.5	214	4.4	4,397	91.1	4,828
Mixed – Non-URM	57	7.6	37	4.9	656	87.5	750
White/Asian Amer	41	7.4	29	5.3	481	87.3	551
Asian Amer/Asian Amer	16	8.0	8	4.0	175	87.9	199
Unknown (e.g., Other, Not Indicated, etc.)	181	6.9	154	5.9	2,299	87.3	2,634
Total	1,458	--	1,237	--	18,755	--	21,450

Figures 1 and 2 show attrition and retention rates by overall and URM ethnicity category, respectively. As can be seen, the first-year stop-out rates were noticeably lower among Asian American (roughly 5%) and White students (roughly 7-8%), than those for underrepresented minority students (8-11%). This is consistent with the national and regional data on attrition.
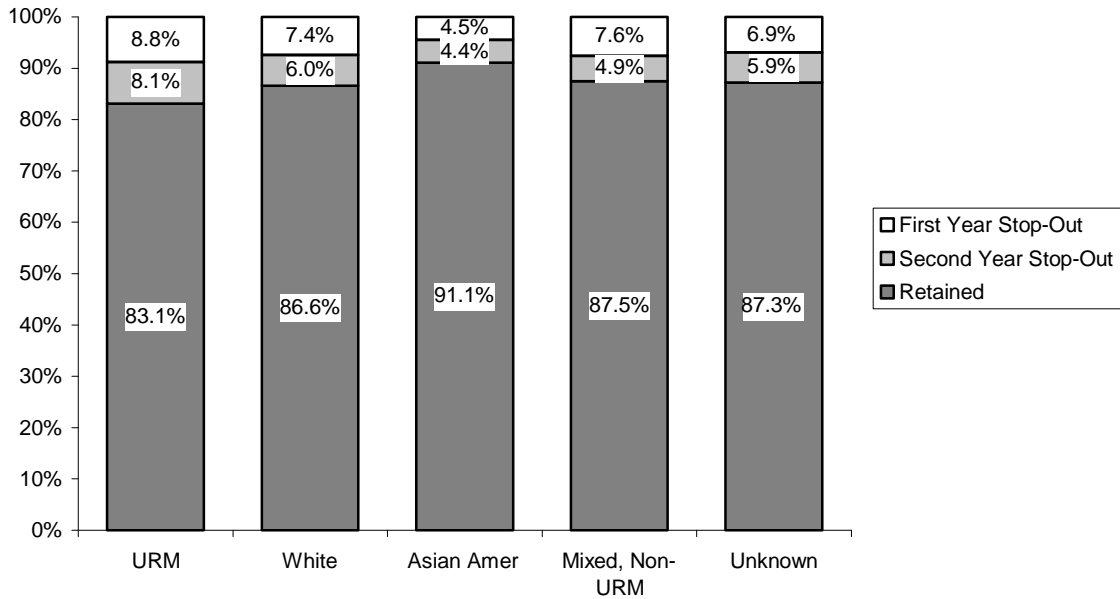
Figure 1. UW attrition and retention rates for 1999 – 2003 entering students by ethnicity
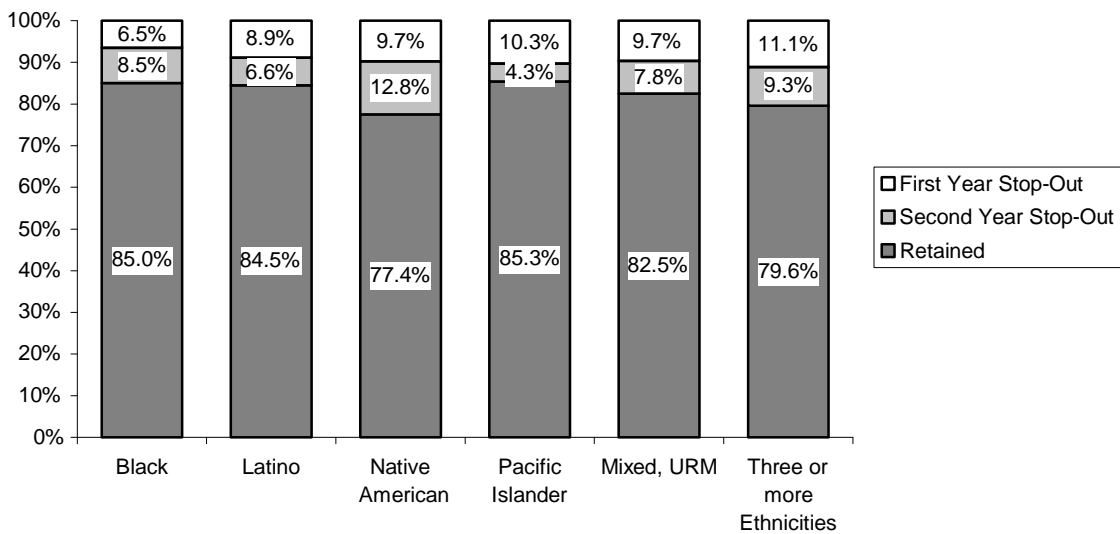
Figure 2. UW attrition and retention rates for 1999 – 2003 entering students by URM ethnicity

In order to determine whether there have been any recent changes in attrition and retention rates, Figures 3-5 show first-year attrition, second-year attrition, and retention rates for 1999-2003

entrants. As shown in Figure 3, the first-year stop-out rate for underrepresented minority students dropped from 12% for 1999 entrants to just below 9% for 2003 entrants.[20]
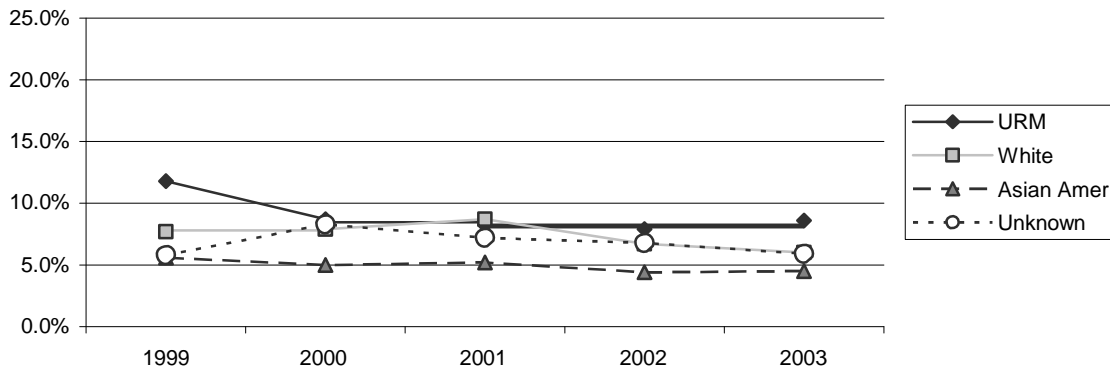
Figure 3. First-year attrition rates: 1999-2003 entering students

Figure 4 shows second-year attrition rates by ethnicity. As in the first year, underrepresented minority students left the UW at higher rates than other students, with an attrition rate between 8-9%. However, a dramatic 4-5% decrease brought the two-year attrition rate for underrepresented minorities to a relatively low 4% for students who entered in 2003. One possible explanation for this shift is that the enrollment of Diversity and Gates Millennium Scholars, which began in 2001, may have reduced overall attrition of underrepresented minority students. According to staff in OMA/D, these two groups of underrepresented minority students entered the UW with higher GPAs and were retained at higher rates than were other minority students. In contrast to the variability in second-year attrition rates for underrepresented minority students, Asian American students generally experienced a stable second-year attrition rate of 4-5%, while their White peers had a slightly higher, yet also fairly stable, second-year attrition rate of around 6%.
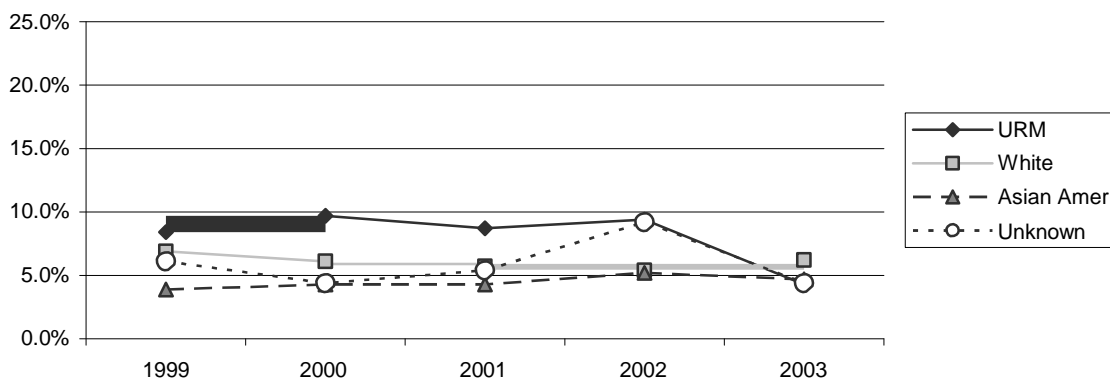
Figure 4. Second-year attrition rates: 1999-2003 entering students

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[20] I-200 took effect in 1999, and some faculty and staff members with whom we spoke speculated that enrollment dipped and attrition improved because we admitted students who presented fewer risks for attrition than we had admitted before I-200.

Figure 5 shows that across all five cohorts, the overall two-year retention rates among Asian American and White students remained fairly stable at around 85% and 90%, respectively. The two-year retention rate among underrepresented minority students, while lower than rates for Asian American and White students, experienced a noticeable and persistent increase, going from 80% in 1999 to record high 87% in 2003. As noted in the "Introduction" to this report and illustrated in Figure 3, retention trends for underrepresented minority students are converging with those for White and Asian American students after 1999.
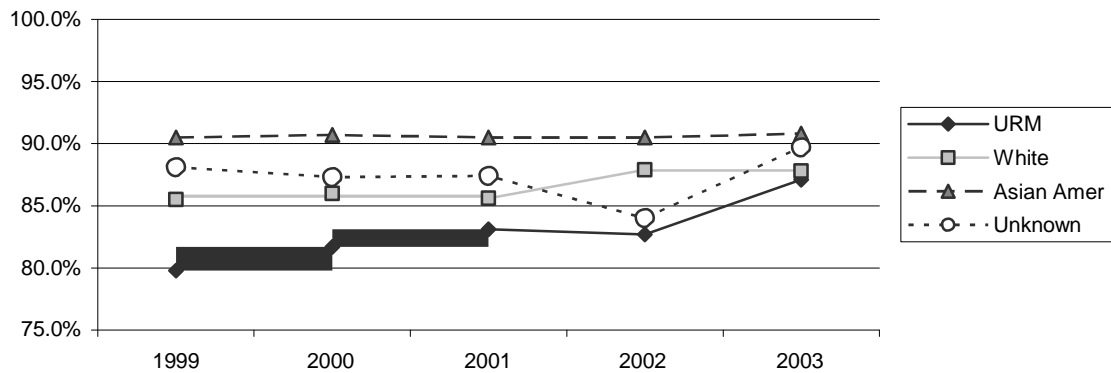
Figure 5. Overall two-year retention rates: 1999-2003 entering students

Gender

Male and female retention differences are small. Table 5 illustrates that the first-year stop-out rates for females were slightly higher than for males for all student groups. In the second year, stop-out rates for females were slightly higher than for males only among underrepresented minority students.

Table 5. Attrition rates by gender

	Stop-out: First year				Stop-out: Second year				Retained			
	Males		Females		Males		Females		Males		Females	
	#	%	#	%	#	%	#	%	#	%	#	%
URM	60	8.6	81	9.0	54	7.7	75	8.3	585	83.7	745	82.7
White	373	6.7	489	8.0	339	6.1	364	6.0	4,833	87.2	5,240	86.0
Asian Amer	117	4.5	157	5.2	125	4.8	126	4.2	2,338	90.6	2,715	90.6
Unknown	76	5.5	105	8.4	84	6.1	70	5.6	1,225	88.4	1074	86.0
Total	626	--	832	--	602	--	635	--	8,981	--	9,774	--

Residency

Washington State residents had higher retention rates than did non-residents, especially multiracial underrepresented minority students (84.8% vs. 72.1%, respectively), Latino students (86.2% vs. 74.6%), and Black students (86.9% vs. 76.8%). Asian American students had the highest retention rates among both residents and non-residents.

Special Program Admittance

We tracked differences in retention rates by special program admittance. Table 6 shows that the retention rate for students affiliated with the EOP program (84.4%) was lower than for students who had no program affiliation (87.9%), enrolled in the honors program (95.3%), or affiliated with athletics (90.9%). Many EOP students enter the UW with lower GPAs and SATs than students unaffiliated with EOP, and EOP students often deal with the same climate issues that other students experience. The few students who were enrolled simultaneously in both the honors and EOP programs were retained beyond their first two years, as were all the students who were enrolled in both the athletics and the EOP program. However, those numbers were quite small.

Table 6. Attrition rates by special program status

		Stop-out: First year	Stop-out: Second year	Retained	Total
No Program	Count	1,047	866	13,833	15,746
	%	6.6	5.5	87.9	100.0
EOP	Count	335	281	3,322	3,938
	%	8.5	7.1	84.4	100.0
Honors	Count	17	15	645	677
	%	2.5	2.2	95.3	100.0
Athletics	Count	16	21	369	406
	%	3.9	5.2	90.9	100.0
Honors/EOP	Count	0	0	32	32
	%	.0	.0	100.0	100.0
Athletics/EOP	Count	0	0	22	22
	%	.0	.0	100.0	100.0
Other	Count	43	54	532	629
	%	6.8	8.6	84.6	100.0

Summary

Data on attrition at the UW shows that underrepresented minority students were retained at lower rates both during their first and second year than were White and Asian American students. These data confirm national and regional information on retention and attrition. Among underrepresented minority students, Native American and multiracial Native American students had the lowest retention rates. Multiracial students whose backgrounds included underrepresented minority groups had lower retention rates than multiracial students whose backgrounds did not include such groups.

Females had somewhat lower retention rates than males, particularly among underrepresented minority groups, and non-residents had lower retention rates than residents, again particularly among underrepresented minority populations. Finally, students affiliated with the EOP program had lower retention rates than those who were unaffiliated, enrolled in the honors program, or affiliated with athletics.

WHY DID UNDERREPRESENTED MINORITY STUDENTS LEAVE THE UW?

The section is organized by themes that emerged both from our conversations with faculty, staff, and students (Table 7) and from our analyses of existing UW data. These include:

- Campus climate
- Financial issues
- Differences between academic needs and family/community/cultural expectations or needs
- Pre-college and first-year academic experience
- Waiting/being embarrassed to ask for help
- Work-related: having to work long hours/having to commute to jobs
- Not getting into one's major of choice/delay in finding one's academic place
- Other

Campus Climate

The literature on the retention of underrepresented minority students increasingly identifies campus climate as a factor in student retention. Hurtado et al. (1999), for example, argue that three aspects of climate—structural, behavioral, and psychological—have powerful effects on the undergraduate experiences of underrepresented minority students at predominantly White institutions.

As Table 7 shows, nearly every faculty and staff member (95%) mentioned campus climate as a major force in underrepresented minority students' decisions to leave the UW. Campus climate was also the most common reason that students gave for why their peers left the UW before graduating. Students often pointed out that the campus climate for underrepresented students was uncomfortable and unwelcoming, both in and out of the classroom.

The strong focus on campus climate by faculty, staff, and students with whom we spoke was consistent with the two campus climate studies conducted at the UW in 1999 and 2000. As described earlier in the "Introduction" section of this report, both surveys showed that minority students felt less positively about the UW campus climate than did White students.

In discussing campus climate, faculty, staff, and students pointed out that aspects of climate often intersected with and amplified each other, as well as affecting other factors in students' decisions to leave the UW. Aspects of climate are detailed below, including a summary on climate.

Structural Aspects of Campus Climate

As Table 7 indicates, the aspect of climate that faculty and staff felt was most significant for underrepresented students was lack of a critical mass of students like themselves at the UW. About 80% of the faculty and staff identified critical mass as a key factor, and most of the students with whom we met also identified the problem of a critical mass of underrepresented minority students at the UW. Furthermore, as noted earlier, critical mass is often cited by the literature on retention as a serious issue for minority students (Rendón, Jalomo, & Nora, 2000; Hurtado et al., 1999, Throgmorton, 1999; Brown, 2000; Schwitzer et al., 1999; Tinto, 1987).

Table 7. Faculty, Staff, and Student Reasons for Why Underrepresented Minority Students Stop Out

Issue and Quotations	N (%) Fac/Staff	Noted by Students
1. Campus Climate	38 (95%)	3
A. Structural Aspects "Critical Mass" ~ Too few students, faculty, and staff from underrepresented minority groups at the UW and implications for students' experience *"Some students feel isolated in large and small classes, where there are often a handful of other students of color. That inhibits them from feeling like they are a part of this community, so it can be easier to leave than to continue to experience that."* *"Just to be more specific about it, students who are encountering this kind of environment for the first time—it can be like you are walking into a minefield—that you might say something just speaking normally and white peers are going to be looking a little bit sideways. They might be fearful of you or they might assume that you are less intelligent because you speak in a certain way or dress in a certain way. That's a lot to deal with day in and day out."*	32 (80%)	3
B. Behavioral Aspects Curricula and teaching practices that do not include the experience of underrepresented minority students *"Students of color—well, just come to our churches and see how they process things. There is constant communication going on, constant commenting and responding to what is said in church. This says we learn by engagement, not just passively. But there is no time to dialogue in our classes."*	24 (60%)	3
UW leadership *"I also think there needs to be more effort on the University's side—it has to be a very clear priority. For me that means going a step beyond diversity committees. It means that we are going to examine our curriculum—the mainline product of the academy—and ask ourselves where we can address issues of concern to faculty and students who are not here yet. If that were happening in an organized way, not fitfully here and there in starts and stops, then we would see a change in the numbers of students coming in. Word gets out about that kind of thing."*	15 (38%)	3
C. Psychological Aspects The message that underrepresented minority students do not belong at the UW *"Statistics will tell you that you are here at this college but you aren't supposed to be because so many students like you don't make it. And then when you run into people who think you shouldn't be here in your classes and that you got a free ride and so on, you start to doubt yourself. And then when your friends who didn't go to school start pulling on you—they are earning money—you start thinking maybe this isn't for me."*	17 (43%)	3
Faculty/departmental insensitivity to the needs of underrepresented students *"And I know this to be the case—one of the ways that we as a University have come to reconcile some of these dilemmas about what units are accessible and what units are not is that we advise students around some units. And that seems to be kind of survivalist. It avoids the harder work of saying 'Why is it that students from underrepresented groups have to avoid being in some departments?' One response to this is to tell students that there are certain places they need to avoid. But I'm not sure that this 'underground railroad' approach to advising is as sophisticated as a University like ours is capable of. I think we are capable of so much more honesty, so much more sophistication."*	7 (18%)	3
Racial microaggression: the need to weigh and interpret experiences *"The other day, I tried to stop [my bus driver] and he pulled out a few bus lengths and made me walk to the door, and then says to me, 'You were late.' Then he waits there and three attractive women get on the bus. He waits for them. How do I read that? Is he a racist? I don't know. And that experience frames my morning. Students go through that thing every day, on the way to this campus and on this campus. How do you study that?"*	5 (13%)	3

Table 7 (continued). Faculty, Staff, and Student Reasons for Why Underrepresented Minority Students Stop Out

Issue and Quotations	N (%) Fac/Staff	Noted by Students
2. Financial Issues *"If they don't feel they have adequate financing for their college, they will look at alternatives—full time employment, making money to help support their families or relieve the stress of having to survive day to day."*	28 (70%)	3
3. Differences between Academic Needs and Family/Community/Cultural Expectations or Needs *"If you have something that your family needs, it is not IF you are going to give it but WHEN you are going to give it."*	28 (70%)	3
4. Pre-college and First-year Academic Experience *"There is a serious gap between the students' expectations about college experience—the extent to which the students were inspired to go to college—and what is happening with teaching and the curriculum—with their preparation for the rigors of the UW experience. That gap has to do in part with the type of high school our students come from, the curriculum, who gets access to AP courses and who doesn't, and access to good teaching."*	20 (50%)	
5. Waiting / Being Embarrassed to Ask for Help *"My heart goes out to this student because there was such a passion to succeed, confronting the possibility of failure and trying to bring meaning between the two—'I'm a high school scholar, so why am I in this position?'—only to recognize that her skill level was in need of support. That's where the Instructional Center is a saving place for our students. That is available to them—but kids don't really want to admit they don't know."*	16 (40%)	
6. Work-related: Having to Work Long Hours / Having to Commute to Jobs *"A lot of African American students have jobs off campus maybe because they have to contribute to family income or something. Also there is a lot of long-distance commuting. They are commuting to jobs they have had since high school."*	14 (35%)	3
7. Not Getting into One's Major of Choice / Delay in Finding One's Academic Place *"Not everyone is going to med school or dental school and engineering is not a good backup for med school. If it is outside of those six majors they have heard of, they don't really want to talk about it."*	11 (28%)	3
8. EOP/OMA Feels like a Stigma *"There are some students who think of coming to OMA as a stigma. Students ask 'Why am I in this program? Why am I taking these courses that are being required of me—like the English 104-105 English class, when I could take 131?'"*	5 (13%)	
9. Personal Reasons *"They have gotten pregnant, they have gotten in trouble with the law, or extreme family issues."*	4 (10%)	3

UW faculty, staff, and student interviewees said that without a critical mass of students who shared their races, ethnicities, and backgrounds, underrepresented minority students often feel isolated. As one staff member pointed out, students can feel simultaneously lost in the large group unlike themselves and conspicuous in that group, and both feelings are uncomfortable. According to one faculty member, such isolation can lead to what Cross (1991) referred to as "spotlight anxiety":

> *"It's not that these students lack in self-esteem or in capability when they get here. But what Steele gets at is having to carry the weight of all the African American population*

on their shoulders—the amount of weight that is placed on every comment, the return of every paper, the burden that comes with that kind of isolation."

Spotlight anxiety can make students feel that they are carrying their race into every academic and social encounter, as this student noted:

"I am the only Black student in all my classes. It is not just annoying, it is uncomfortable. I feel that I represent the whole Black race. If I walk in a minute late, then it's not just me walking in one minute late, it's the whole Black race."

However, spotlight anxiety has a greater impact than personal discomfort. Linked to the message that underrepresented minority students do not belong in college (Steele, 1997), it connects with academic performance by silencing students, keeping them from asking or answering questions, from articulating their own views or commenting on those of others—in short, from full participation in their own learning.

The lack of a critical mass of others like oneself can influence aspects of learning related to peer groups. Faculty and staff members pointed out that when students—especially freshmen—feel disconnected from other students, it can be difficult to form academic networks, such as study groups, or to find partners with whom they can work on projects. Students also said that having few social networks of others like themselves, in and out of class, was difficult. They noted that the sheer size of the campus and classes, as well as the racially segregated nature of the UW, meant different groups often have little meaningful and sustained interaction with each other, a reality on many college campuses, as noted by Rimer (2002).

The sense that there are few other students like oneself can make students hesitate to speak with others about their experience in college. If students feel they cannot share their UW experiences with other students, it can be difficult to separate hurdles that are "normal" from those requiring immediate attention. Without the ability to "check" their experiences against those of others, students sometimes fear that they are the only ones who are homesick, who have failed a test, who are having trouble with financial aid, who are having difficulty separating from parents, or who are afraid to approach faculty and staff. Furthermore, when students cannot share their UW experience with other students, they lose the possibility of learning how others have resolved similar issues.

Networks that allow students to work with faculty are also essential for students' success, as the literature on retention shows (Tinto, 1993). About half of the faculty and staff and many of the students with whom we spoke noted that the small number of minority faculty, staff, and administrators at the UW is part of the critical mass problem. It increases both the students' sense of isolation and the message that underrepresented minorities do not belong at predominantly White institutions. Moreover, students acknowledged that the few faculty members of color on campus are often overextended and over-involved just as they themselves are, making the process of building connections with faculty of color even more difficult.

Behavioral Aspects of Campus Climate

Faculty, staff, and students identified two aspects of climate included in Hurtado's "behavioral" category (1999) that affect underrepresented minority students' decisions to leave: curricula and teaching practices and UW leadership.

Curricula and Teaching Practices

In addition to citing critical mass creating a less than positive climate for underrepresented students, about 60% of the faculty and staff we interviewed believed that the curriculum and the teaching strategies students experience may be problematic for underrepresented minority undergraduates. They noted that classroom curricula sometimes left out the experiences of students of color and that teaching strategies often left little room for students' participation or intellectual contributions. Several interviewees believed that interactive pedagogies were more consistent with minority students' cultural practices than lecture/test teaching modes.

Students also made this point. Many students stated that they often felt discouraged by their professors in large lecture style classes, and several students spoke of the disconnect between the traditionally Western view of education and their ways of learning. These students said that the ways in which teaching is carried out in the classroom are not conducive to the ways they learn, which is more interactive, narrative, and communal. One student said that large lecture-style courses communicate that faculty do not care about students:

> *"People just don't care about me, coming in to class, and knowing the professor doesn't care if you're here is hard to get used to."*

Students raised other issues about curriculum and teaching practices, as well. Some students noted that as first generation college students they have a difficult time in class because they have not been exposed to disciplinary specific terms or norms, as their peers whose parents attended college might have been.

A few students pointed to problems related to the heavy reliance on technology in the classroom. These students discussed how much work and information involve computer use and pointed out that not having easy access to computers often leaves them unprepared when they enter class. One student spoke about going to class on the first day of fall quarter to find that the majority of students had already read and were ready to discuss a chapter that had been assigned via email. Because this student lived in a rural community where many people do not have regular access to the internet, she was unaware that the professor had already assigned homework prior to the quarter's start.

UW Leadership

More than a third of the faculty and staff we interviewed mentioned UW leadership as a factor in underrepresented students' decisions to leave the UW, as seen in Table 7. Students also mentioned leadership as a factor in others' decisions to leave, usually discussing leadership in relation to campus climate.

Many faculty and staff praised President Emmert for publicly re-committing the UW to diversity, but many also felt that all levels of leadership at the UW need to be more proactive in making that commitment manifest. As one interviewee said:

> *"It speaks to a need for an organizational renewal and commitment across all levels that doesn't just fall to the responsibility of the OMA, but is the responsibility across units, across the campus, and calls on deep and abiding and renewed understanding. We are an intellectual community, but we come up short in our understanding of these problems and their nuances."*

Others suggested that leadership must include forging connections with members from underrepresented minority students' communities. For example, in speaking of the UW creating closer connections to Native American communities, one interviewee said:

> "There is support and then there is support that comes from a deep connection and an intentional connection with the tribal community. There's support and support that is informed by cultural awareness."

In discussing the role that leadership plays in retention, students felt that past and current leadership had not adequately addressed the needs of underrepresented minority students on campus.

Psychological Aspects of Campus Climate

In addition to structural and behavioral aspects of climate, conversations with faculty, staff, and students revealed psychological aspects of climate that affect underrepresented minority students' decisions to leave the UW. These included the message that underrepresented minority students do not belong at the UW, that faculty/departments are insensitive to underrepresented minority students, and that racial microaggression is prevalent.

The Message that They Do Not Belong at the UW

Regarding climate issues, faculty, staff, and students noted that underrepresented minority students often "get the message"—from the society at large, as well as from individuals on campus—that they do not "belong" in college at all or, specifically, at the UW. This message becomes clear when one sees few faces like one's own among the student and faculty populations. The sense that one does not belong at the UW can lead students to drop out when other factors are also present.

Faculty, staff, and students noted that often the message that underrepresented minority students do not belong at the UW comes from their friends and families, who sometimes argue that they should not pursue a college education or do not need a college education to do well. We did not gather information about the degree to which this may be the case for other students as well.

Faculty and Departmental Insensitivity to Underrepresented Minority Students

As Table 7 shows, another feature of climate that some faculty and staff members noted was a general insensitivity to the needs and experiences of underrepresented minorities in some academic departments. Several interviewees pointed out specific academic units that students felt they had to avoid or that they were advised to avoid by others. Some students spoke of feeling that they were "funneled" into certain majors (such as American Ethnic Studies or Sociology) and not encouraged to pursue others—what one faculty member, quoted in Table 7, described as "the underground railroad approach" to advising. A few students noted that their peers simply lost interest in the coursework in majors into which they had been advised and left the institution.

Speaking about faculty insensitivity, one faculty member said that his peers would probably respond to that issue by saying:

> "I respect performance, and I don't care what color that performance comes in."

But he added, echoing Steele (1997):

> *"If your sense is that for students of color performance isn't very high, you are going to communicate that."*

Racial Microaggression: The Need to Weigh Experiences

Finally, faculty, staff, and students noted that people of color, both at the UW and in the greater society, regularly experience insulting treatment that they are not sure how to interpret. On the one hand, such treatment can be viewed racially as examples of "racial microaggression" (Solorzano 2000) described as subtle visual, verbal, or nonverbal insults directed toward people of color, which are sometimes unconscious. On the other hand, such treatment may not be racially motivated but rather attributable to generalized bad behavior.

As faculty, staff, and students described behaviors that could be perceived as racial microaggressions, their focus was on how difficult it becomes to continuously weigh behaviors that other students would not think twice about. They noted that time and energy spent on weighing and interpreting a number of such behaviors every day becomes overwhelming after a time, and that students sometimes would rather seek environments in which racial microaggression was infrequent—where they knew they were safe from such behaviors—than to stay in those where frequency necessitated constant interpretation.

One student described such behavior:

> *"There has not been one single test where someone has sat next to me, there can be five seats available, but the seat next to me is last the seat chosen. Every time I walk into a test, I'm the last person to be sat by."*

Another student also spoke of weighing such experiences:

> *"Being on campus you constantly question people's motives. I want to believe that people aren't racist or ignorant, but every time you bump into people you wonder why. It will [mess] your head up, create a lot of bad things in your environment."*

Solorzano points out that many underrepresented minority students are carrying the cumulative burden of a lifetime of microaggressions into any new situation (2000). As discussed in the literature review, racial microaggressions on college campuses can take a variety of forms. Interestingly, faculty, staff, and students gave us specific examples of students who had experienced each of these forms of microaggression, without labeling them as such.

The need to weigh and interpret microagressions is a fact of life for most people of color, not just for students.

Financial Issues

Research on retention of underrepresented minority students often points to unmet financial need and other financial issues as powerful influences in students' decisions to leave college or remain (Upcraft, Mullendore, & Fidler, 1994; Rendón, 1994; Mohammadi, 1994; University of Minnesota, 2003; Tinto, 1994). Our conversations with faculty, staff, and students, and the data on financial aid from the UW's Student Financial Aid Office suggest that finances play such a role at the UW.

Faculty, Staff, and Student Comments on Financial Issues

Consistent with the literature, 70% of the faculty and staff mentioned financial issues and needs as important factors in retention of underrepresented minority students (see Table 7). Students also reported that financial pressures were often key factors in students' decisions to leave the UW.

Interviewees pointed to a number of ways finances might influence underrepresented students' decisions, including:

- The need to increase work hours to pay for the relatively high cost of living in Seattle and/or to balance what students said was a decline in financial aid available to them after the first two years and the effect such increases have on time for academic work.
- The fear of being in debt upon graduation, especially with few employment possibilities for liberal arts graduates.
- Cultural definitions of what debt means, which may differ in low, middle, and high-income families.
- The fact that many underrepresented minority students provide financial support to their families—either directly, by sending a portion of their financial resources home to parents, or indirectly, by babysitting or providing other time-demanding services to families. This was a point mentioned frequently by all groups with whom we spoke. As one student said:

   "Our families can't really help us financially, and we are already taking finances away from them by not working [full-time] and so we can't really ask for more. Some of us still send money home. For many of us family comes first and first, and we feel culturally responsible for our people in that we have to be a part of our community even if we are not home."

The financial problems that underrepresented minority students experience have been well-documented by others, and the faculty, staff, and students with whom we spoke agreed that paying for college was a serious consideration when students were deciding whether to continue their education or stop out.

Student Financial Aid Data[21]

As discussed in the Methodology section, we were able to gather financial aid data for students from the 2001 and 2002 cohorts. Student Financial Aid data confirmed faculty, staff, and students' reports that underrepresented minority students (as well as Asian American students) are under greater financial pressures than are White students. Furthermore, these data show that students who stop out are largely under greater financial pressure than students who are retained.

Aid Applicants and Recipients

Many incoming freshmen apply for aid. According to data on financial aid, close to two thirds of the incoming freshmen applied for financial aid during their first year at UW, while roughly half of the students entering their second year applied for aid during the 2001-2002 period. Examination of the student financial aid application rates by ethnicity revealed that underrepresented minority students

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[21] Due to the complexity of the Student Financial Aid database, results in this section are presented as suggestive only. A more in-depth analysis of Financial Aid data, in collaboration with the Office of Student Financial Aid, would allow us to clarify some of our findings and to extend what we have learned to all low income students.

applied for aid at considerably higher rates than did White (63.6%) and Asian American (71.8%) students, suggesting greater economic need (Table 8). Nearly all of the Native American (89.4%), Black (85.4%), Pacific Islander (85.4%), and Latino (83.9%) students applied for financial aid during their first year at the University in 2001 and 2002.

Similarly, multiracial students with underrepresented minority backgrounds applied at higher rates than did multiracial students whose ethnic backgrounds did not include underrepresented groups. Second-year patterns were similar to those for the first year, although the overall rates were comparatively lower across all ethnic groups. For example, White students' applications dropped considerably from 63.6% in the first year to 47.3% in the second year.

Table 8. **Aid applicants by ethnicity**

	First Year			Second Year		
	Total cohort	Number who applied for aid	1st year %	Total cohort	Number who applied for aid	2nd year %
Black	164	140	85.4	158	129	81.6
Latino	199	167	83.9	182	139	76.4
Native American	85	76	89.4	80	64	80.0
Pacific Islander	41	35	85.4	39	31	79.5
Mixed: URM Ethnicities	208	164	78.8	185	126	68.1
Three or more ethnicities	27	21	77.8	22	13	59.1
White	4,804	3,053	63.6	4,432	2,095	47.3
Asian American	2,054	1,474	71.8	1,960	1,221	62.3
Mixed: Non-URM Ethnicities	286	186	65.0	267	141	52.8
Unknown	1,186	526	44.4	1,102	375	34.0
Total	9,054	5,842	64.5	8,427	4,334	51.4

Table 9 compares students who stopped out and students who were retained in all groups.[22] Consistent with results displayed in Table 8, Table 9 shows that underrepresented minority students applied for aid at slightly higher rates than did all White and most Asian American students, especially during their second year of enrollment. Also shown in Table 9 is an interesting pattern regarding ethnicity. White and Asian American stop-outs tended to apply for aid at much higher rates than did White and Asian American peers who were retained, during both their first and second years of attendance at the University. In contrast, underrepresented minority students who were retained were more likely than stop-outs to apply for aid during their first and second years of enrollment.

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[22] In comparisons of students who stopped out with retained students, we had to combine underrepresented ethnic groups into one "underrepresented minority" (URM) category, because of the small numbers involved.

Table 9. Aid applicants during their first two years of enrollment by minority and stop-out status

		Total cohort	First Year		Second ear	
			Number who applied for aid	%	Number who applied for aid	%
URM	Stop-out: First Year	58	47	81.0		
	Stop-out: Second Year	66	50	75.8	45	68.2
	Retained	600	506	84.3	457	76.2
White	Stop-out: First Year	372	246	66.1		
	Stop-out: Second Year	267	182	68.2	143	53.6
	Retained	4,165	2,625	63.0	1,952	46.9
Asian Amer	Stop-out: First Year	113	84	74.3		
	Stop-out: Second Year	110	89	80.9	74	67.3
	Retained	2,117	1,487	70.2	1,288	60.8
Unknown	Stop-out: First Year	84	46	54.8		
	Stop-out: Second Year	80	31	38.8	17	21.3
	Retained	1,022	449	43.9	358	35.0
Total		9,054	5,842	64.5	4,334	51.4

Parents' Marital Status and Educational Levels

Another common way of shedding light on financial resources available to students is to look at the marital status and educational levels of students' parents. Married parents with high educational levels are thought to have a higher socioeconomic status than others. In married households, both parents can potentially contribute to the income of the family, and parents with college educations can often find higher paying jobs than parents with less education.[23] Financial aid data for 2001 and 2002 showed that underrepresented minority students had a higher percentage of divorced or separated parents than White and Asian American students, with first-year underrepresented stop-outs having the highest levels of divorced or separated parents at 34.0%.

Furthermore, the data showed that parents of underrepresented minority and Asian American students, especially among first-year stop-outs in these groups, had lower levels of education than did parents of White students. This result has a bearing on the ability of parents to help students navigate college systems, as well as on their ability to provide financial support to their children in college.

Adjusted Gross Income and Parents' Estimated Contribution

An important factor in determining aid allocations and a common proxy for socioeconomic status is the annual adjusted gross income of the applicants' parents, based on family income tax returns submitted as part of the Free Application for Federal Student Aid (FAFSA).[24] The expected family contribution is a parallel measure, representing how much money the federal guidelines assume the family is able to contribute to the students' education.

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[23] The UW Admissions "UW by the Numbers" webpage informs students that "The lifetime earnings of a person with a college degree are on average double those of someone without a degree." See http://admit.washington.edu/Numbers.

[24] Note that adjusted gross income is not the only factor considered in allocating aid; in fact, for some very low income students, it is not used at all.

Table 10 and Figure 6 show that the estimated adjusted gross income of the student financial aid applicants, as well as their expected family contributions, was markedly lower for underrepresented minority and Asian American students than for White students. The expected family contribution among White students in many cases was double that for Asian American and underrepresented minority families, suggesting that White students have more financial resources available than the other groups.

Table 10. Adjusted gross income and expected family contribution by minority and stop-out status

		Adjusted gross income of applicants' parents				Expected family contribution			
		Median	25[25] percentile	75 percentile	Trimmed Mean[26]	Median	25 percentile	75 percentile	Trimmed Mean
URM	Stop-out: First Year (47)	53,435	28,323	82,596	57,580	4,443	1,404	22,430	11,014
	Stop-out: Second Year (50)	39,860	15,701	54,718	41,849	3,696	1,007	8,607	5,914
	Retained (506)	47,410	24,193	81,209	52,890	5,108	946	15,477	9,117
White	Stop-out: First Year (246)	59,834	33,631	95,261	65,729	10,258	3,297	22,313	13,494
	Stop-out: Second Year (182)	65,031	33,343	100,521	68,296	10,837	3,741	24,590	14,921
	Retained (2,625)	72,889	42,227	103,989	74,771	14,240	5,263	27,905	17,744
Asian Amer	Stop-out: First Year (84)	42,742	20,466	78,796	51,792	4,896	498	18,805	9,728
	Stop-out: Second Year (89)	40,194	22,692	69,900	47,906	4,082	999	12,648	7,318
	Retained (1,487)	43,515	20,819	72,892	48,335	4,972	800	15,997	9,152
Un-known	Stop-out: First Year (46)	64,104	31,580	89,243	61,745	7,689	2,987	12,586	9,149
	Stop-out: Second Year (31)	73,165	18,792	123,195	76,345	14,708	2,912	25,099	16,647
	Retained (449)	63,981	36,489	95,995	66,913	11,519	3,312	23,280	14,684

Moreover, the adjusted gross income appeared to be positively associated with retention among White students, as it was higher for White students who were retained than for those who stopped out. However, we found no such relationship between retained and stopped out underrepresented minority and Asian American students, suggesting that adjusted gross income was not as closely related to retention among these students as it was among White students. This result suggests that what matters in relation to attrition and finances is the remaining financial need after aid allocation.

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[25] The 25th and 75th percentiles provide a measure of the range of scores on a given variable. By definition, twenty-five percent of the scores are below the 25th percentile and twenty-five percent are above the 75th percentile, leaving fifty percent of the scores between the 25th and 75th percentiles.

[26] The trimmed mean was calculated by trimming 5% of the data points from the top and bottom. It excludes outliers that may distort central measures of the data and so provides a more realistic view of the financial situation of the students than a standard mean might suggest.
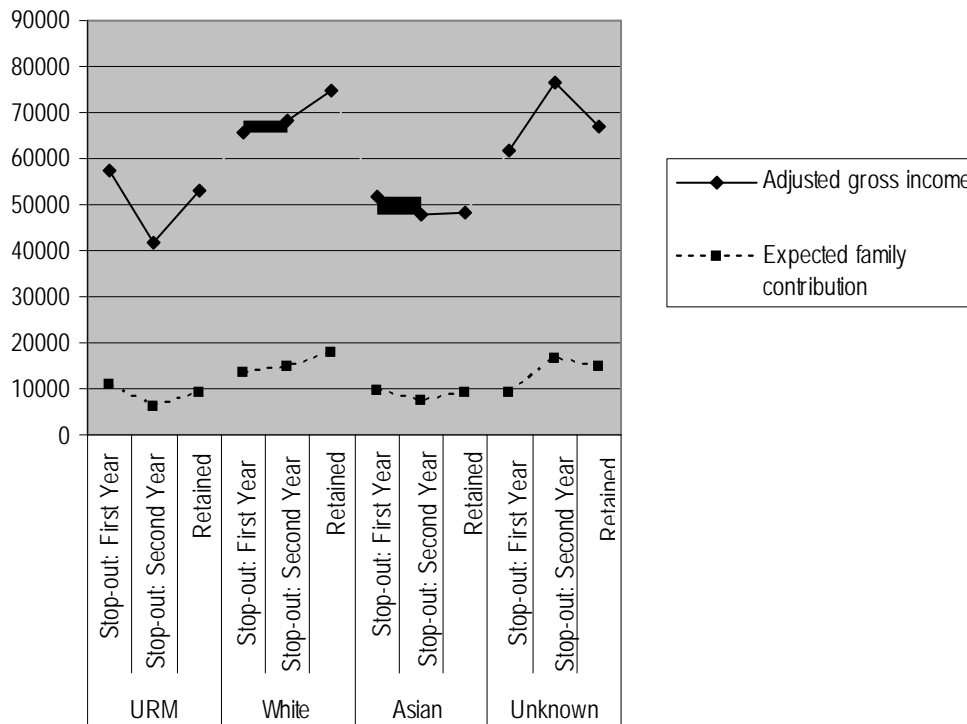
Figure 6. Estimated trimmed mean for first-year adjusted gross income and expected family contribution by minority and stop-out status (constant 2002 dollars)

Unmet Need

One way to gauge the relationship between student financial aid and retention is to examine the estimated need before and after aid allocation in relation to stop-out status. The estimated financial need of each applicant is based on the estimated costs of attendance (budget) minus the total resources (resources) available to the applicant and used in allocating aid.[27] Students who have more resources available than the estimated costs of attendance are recorded as having no need, which explains why a considerable number have a zero listed as their remaining need.

Table 11 compares the unmet need of first-year students who stopped out that year, stopped out the second year, and were retained beyond the second year. Perhaps not too surprising, given the examination of the budget and resources presented above, underrepresented minority and Asian American students tended to have greater unmet financial need in their first year of enrollment than did White students. Moreover, students who stopped out in their first or second year tended to have greater unmet need in that first year than those who were retained beyond their first two years. These results suggest that students who have an unmet need of about $2,000 in their first year are at greater risk of dropping out than other students, but that students whose unmet need is about $1,000 in that first year are at risk for leaving the second year. In other words, the *lower* the amount of unmet financial need, the *higher* the rate of retention.

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[27] Dollar amounts in the "need before student financial aid" allocation do not match those suggested by Table 11—the difference between "estimated budget" and "resources"—because some students have resources in excess of their costs of attendance. In the "need before student financial aid" estimation, these students are recorded as having "zero" need. Accordingly, the "need before student financial aid" averages may be higher than the average differences between the "estimated budget" and "resources" as presented in the table, where students with resources in excess of the costs of attendance are recorded with negative values.

　　　University of Washington Study of Attrition and Retention (UW STAR)

Table 11. Estimated first-year need before and after student financial aid allocation by minority and stop-out status

		Need before student financial aid				Remaining need after student financial aid			
		Median	25 percen-tile	75 percen-tile	Trimmed Mean	Median	25 percen-tile	75 percen-tile	Trimmed Mean
URM	Stop-out: First Year (47)	5,780	0	10,075	5,827	0	0	3,539	2,104
	Stop-out: Second Year (50)	7,139	1,333	11,763	6,909	0	0	3,220	1,101
	Retained (506)	5,518	0	11,282	5,777	0	0	0	330
White	Stop-out: First Year (246)	2,030	0	9,716	4,583	0	0	2,338	1,292
	Stop-out: Second Year (182)	1,090	0	9,942	4,308	0	0	392	592
	Retained (2,625)	0	0	6,445	2,898	0	0	0	325
Asian Amer	Stop-out: First Year (84)	5,005	0	13,406	6,837	25	0	4,009	1,963
	Stop-out: Second Year (89)	9,043	1,280	12,129	7,605	32	0	3,134	1,607
	Retained (1,487)	6,261	0	11,265	6,034	0	0	1,632	868
Un-known	Stop-out: First Year (46)	4,551	0	10,947	5,756	369	0	3,407	1,846
	Stop-out: Second Year (31)	1,479	0	10,296	4,296	0	0	2,122	803
	Retained (449)	995	0	8,762	4,055	0	0	943	706

The data also showed a relationship between need before student financial aid allocation and remaining need after student financial aid allocation, especially among underrepresented and Asian American first-year stop-outs. As shown in Figure 7, these students had a lower level of financial need before aid allocation, but a higher level of unmet need, than did their second-year stop-out peers. Additionally, underrepresented minority students who stopped out during their first year tended to have about the same need before aid allocation as underrepresented students who were retained beyond their first two years. However, first-year stop-outs had higher unmet need after aid allocation than did their peers who were retained. These patterns suggest that increased amounts of aid are positively associated with better retention rates among underrepresented students.

Although we wanted to compare unmet need and retention by resident and non-resident status, our sample was too small to warrant these comparisons. However, the level of unmet need tended to be higher among non-residents, suggesting stronger financial pressure on these students. [28]

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[28] Results from a qualitative study of a small sample of freshmen who sought to transfer from the UW at the end of their freshman year in 2006, conducted by the Registrar's Office and the OEA, supported this finding. It concluded that cost was a significant factor in the decisions of out-of-state freshmen to leave the UW.
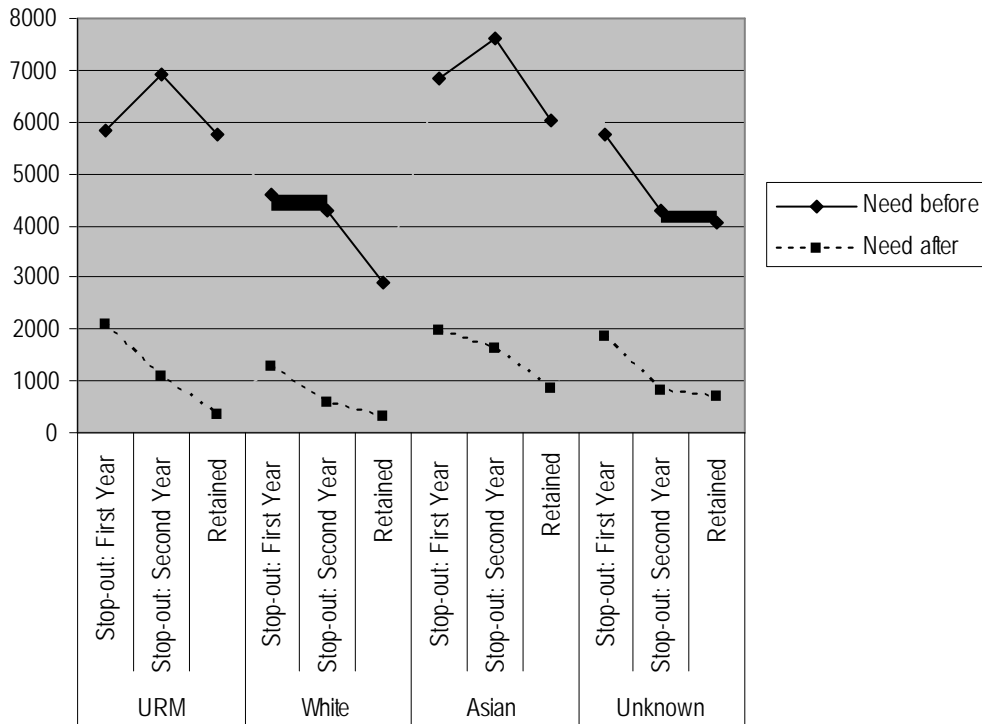
Figure 7. Estimated trimmed mean for first-year need before and after student financial aid allocation (in constant 2002 dollars) by minority and stop-out status

Emergency Loan Patterns

The Office of Student Financial Aid provides short-term "emergency" loans to assist UW students with temporary cash flow problems. These loans are generally available within one to four working days and repayment is due by the next quarter. There is no interest on these loans, but there is a service charge ($30) added to the repayment amount. The maximum amount undergraduates can borrow is $2,000 per quarter. If the loan is not repaid by the due date, holds are placed on the student's registration and transcript, preventing her from registering for classes, adding/dropping classes, getting a copy of her transcript, or applying to a major. Late fees begin to accrue after the due date. Eventually the unpaid account may be referred to an outside collection agency, which could be reflected later in the student's credit record.

As shown in Table 12, many incoming students took out short-term loans during their first year of enrollment in 2001 and 2002. This rate was higher for underrepresented minority students; about one in five of the UW's underrepresented minority students took out a short-term loan. First-year and second-year stop-outs were generally more likely than retained students to acquire short-term loans.

Table 12. Number of students who took out short-term loans during their first- and second-year of enrollment by minority and stop-out status

		First Year		Second Year	
		Count	%	Count	%
URM	Stop-out: First Year	9	18.8	--	--
	Stop-out: Second Year	12	22.2	17	31.5
	Retained	81	15.5	130	24.8
White	Stop-out: First Year	28	11.2	--	--
	Stop-out: Second Year	16	8.4	22	8.9
	Retained	107	3.8	219	7.8
Asian American	Stop-out: First Year	11	12.6	--	--
	Stop-out: Second Year	15	16.1	17	18.3
	Retained	78	4.9	181	11.4
Unknown	Stop-out: First Year	4	8.7	--	--
	Stop-out: Second Year	1	3.0	6	18.2
	Retained	22	4.4	40	8.1

Note: The percent columns show the number of students taking out short-term loans as a proportion of the respective row category (e.g., the proportion of underrepresented minority first-year stop-outs taking loans, etc.) and pertain solely to students in the 2001 and 2002 cohorts.

As Table 13 shows, average loan amounts during students' first year of enrollment tended to be slightly higher among first- and second-year stop-outs than among retained students. First-year stop-outs took out more money in short-term loans than second-year stop-outs. On the whole, the median amount of emergency loans was roughly the same across minority status.

Table 13. Dollar amount of short-term loans taken out during first year of enrollment

		Median	25th Percentile	75th Percentile
URM	Stop-out: First Year (9)	1,710	1,093	3,420
	Stop-out: Second Year (12)	1,600	1,024	3,720
	Retained (81)	1,425	840	2,138
White	Stop-out: First Year (28)	1,605	857	2,975
	Stop-out: Second Year (16)	1,467	723	1,802
	Retained (107)	1,500	950	1,710
Asian American	Stop-out: First Year (11)	1,629	1,425	2,100
	Stop-out: Second Year (15)	1,500	1,500	2,423
	Retained (78)	1,500	1,217	1,802
Unknown	Stop-out: First Year (4)	--	--	--
	Stop-out: Second Year (1)	--	--	--
	Retained (22)	1,500	758	1,710

Table 14 shows that, in contrast to the findings shown in Table 12, retained students tended to take out more in loans during their second year than the second-year stop-outs. This may be due to the possibility that second-year stop-outs attend UW for fewer quarters than retained students.

Table 14. Dollar amount of short-term loans taken out during second year of enrollment

		Median	25th Percentile	75th Percentile
URM	Stop-out: First Year (0)	--	--	--
	Stop-out: Second Year (17)	1,479	1,085	2,686
	Retained (130)	1,710	1,272	3,135
White	Stop-out: First Year (0)	--	--	--
	Stop-out: Second Year (22)	1,496	1,081	1,710
	Retained (219)	1,710	1,140	2,565
Asian American	Stop-out: First Year (0)	--	--	--
	Stop-out: Second Year (17)	1,710	1,563	3,232
	Retained (181)	1,710	950	2,653
Unknown	Stop-out: First Year (0)	--	--	--
	Stop-out: Second Year (6)	855	473	3,515
	Retained (40)	1,710	1,312	1,853

Differences between Academic Needs and Family/Community/Cultural Expectations or Needs

The literature on retention raises the issue of the differences between needs and values in the families, communities, and cultures of underrepresented minority students and those of predominantly white academic institutions (Harris & Kayes, 1996; University of Minnesota, 2003). This issue also came up in conversations with faculty, staff, and students. As Table 7 shows, 70% of the faculty and staff and nearly all the students mentioned differences and conflicts between what it takes to be successful at the UW academically and the expectations, needs, and values of students' families, communities, and cultures.

Faculty, staff, and students noted that underrepresented minority students' parents are proud of their sons' and daughters' college aspirations. Research also shows that minority parents believe in the power of education to improve the lives of their children and their communities. For example, a survey conducted by the New York-based Public Agenda (Immerwahr & Foleno, 2000) found that Black and Latino parents considered college to be more important to their children's success than did White parents.

Faculty, staff, and students also observed that sometimes parents of underrepresented minority students do not fully understand the rigorous demands college makes upon young students because many of them did not attend college themselves. As noted previously, the parents of UW's underrepresented minority and Asian American students, especially among first-year stop-outs in these groups, had lower levels of education in general than did parents of White students.

Some interviewees suggested that this problem is more acute when students are the first in their families to go to college. They pointed out that even if parents are committed to helping their children succeed at the UW, they may not fully understand what academic success requires of their children, a factor noted by the literature on first-generation students. Other faculty and staff members noted the obvious interaction between family needs and financial issues, stating that even when parents do understand how hard college can be, they sometimes have few choices other than to ask for their sons' or daughters' help.

Comments from faculty and staff provide examples about what underrepresented minority students are sometimes called on to provide for their families and communities:

"In some immigrant families, the children are the interpreters. There's a lot of home and domestic things that you are responsible for. It's both an emotional and cultural responsibility to help your family get through America."

"A Tongan boy's grandmother had passed away in New Zealand. His mom had to get there, so he had to take out an emergency loan to buy her ticket, but there was no money there to pay back the loan. He couldn't pay it back and he couldn't get more financial aid until he did, so he had to leave the UW."

"For me, it was a struggle to try and explain why I couldn't spend more time with my parents. So even in my own experience, this issue came up."

Students' own values dovetail with the real needs of families and communities. Faculty and staff noted that many underrepresented minority students place higher value on the family's and the community's well-being than on their own academic success. In fact, underrepresented minority students often spoke of focusing on their academic success as "selfish." Therefore, when the family or community needs the student's help, he is likely to provide that help, whether or not his grades suffer. As one student said:

"[The UW] can't ask me to put my grades first because my family always comes first, so when they say that it really bothers me. They don't understand."

Underrepresented minority students also strongly value helping their communities advance. Faculty and staff pointed out that many underrepresented students are actively engaged, formally and informally, in recruiting other students of color to the UW. They tutor in inner-city schools, serve on committees and in organizations aimed at helping underrepresented populations do well, and help each other with school work and social issues. As one student put it:

"If I do something that can open a path for someone behind me that is important. Even if it's just one person, it would still be worth it."

Some faculty and staff members described this commitment to community needs as "second jobs"—though unpaid—for underrepresented students, and voiced concerns about the time this work took from students' academic work. As one staff member said:

"What I am hearing is that our students are over-involved—trying to do research with faculty, engaging with classes, even studying abroad. On top of that they are trying to do all this outreach to the minority community—bringing middle school and high school kids to us from Yakima, going back to their high schools to recruit, serving as mentors for underrepresented kids. And they are heavily involved in all these student activities, too. And on top of all this service, they all have jobs. They are over-extended. They feel like they are sacrificing themselves for the next generation. Those are their words. My concern is that our kids are so involved in doing this outreach and giving back that their grades are suffering."

One student mirrored the staff member's comment:

> *"We are all here for an education, but not only are we going to school for our own futures, we are doing things to secure our communities, to make a difference here for people who are coming in. We aren't just trying to handle the academics; we are also doing recruitment. Sometimes your academic work suffers because of this. A lot of my mentors are from UW and not a one of them doesn't think they couldn't have done better if they weren't involved in so many community things—recruiting, meeting with the black student union, protesting. This is volunteer work. You don't get paid for it. And in the immediate present there are no benefits for doing it, but people still are slaving day after day to make this a better campus. It gets really hard and overwhelming."*

Communities can also play highly supportive roles. Some interviewees noted that instead of family and community needs conflicting with students' academic work, whole communities sometimes affirm a student's individual college effort, as this interviewee described:

> *"A lot of these students we recruit are stars at their high schools. Their whole community got behind them. When I went back to my community, it wasn't uncommon for people to stop me on the street and ask me how things were going."*

Pre-college and First-year Academic Experience

The literature on retention points to students' high school experience as one factor in college attrition (Upcraft, Mullendore, & Fidler, 1994; Rendón, 1994; Mohammadi, 1994; University of Minnesota, 2003), as well as their first-year college work. Responses from faculty and staff and data from the UW student database suggested that some aspects of students' pre-college and first-year academic experience may influence UW students' decisions to leave.

Faculty and Staff Comments on Academic Experience

About half of the faculty and staff we interviewed, but none of the student groups, mentioned students' pre-college academic and/or first-year UW academic experience as causes for student attrition. Many faculty and several staff members said that underrepresented minority students sometimes were not fully prepared by their pre-college experience for the academic work required by the UW.

Some of the interviewees also noted that students of color often come from ill-equipped and poorly-funded high schools, indicating that the issue of academic experience intersects with financial issues. As one faculty member said:

> *"So the question is how are the high schools making students ready for college, to what extent is tracking still in place—you know, colored folks get the vocational track, white folks get college bound track. It begins from the first day kids come to school—people track them without even being aware of that. And one of the prices for this is the cost to that student's sense of himself."*

Student Database Information

This section presents findings regarding students' high school GPAs, SAT scores, and UW GPAs for students who were retained and for those who stopped out between 1999 and 2003. However, there are limitations to each of these factors as a measure of pre-college preparation, and we discuss these limitations in each subsection.

High School GPA

High school GPAs are often considered the best predictors of student performance in college. However, high school GPAs can sometimes lead to incorrect assumptions about students' academic experience. Two students, for example, can enter the UW with identical high school GPAs, but one of those students might have taken extremely challenging classes and the other may have taken easy courses; one of the two may have studied very hard for her GPA and the other may have slacked off; one may have attended a well-equipped and well-funded school and the other may have attended an under-funded school with little access to technology and no advanced courses. Therefore, comparisons of high school GPAs must be read with these limitations in mind.

Table 15 compares by ethnicity the high school GPAs of students who left the UW in their first and second years with students who were retained. As the table indicates, the mean high school GPA for underrepresented minority students was 3.49, slightly lower than the average high school GPAs for White (3.67) and Asian American students (3.66). These GPAs were so close, however, that it is likely that students' expectations for how well their pre-college experience had prepared them for college were quite similar. In other words, underrepresented minority, White, and Asian American students' GPAs likely communicated the same message to them—that they would be able to handle college work. Furthermore, since we can expect a decrease of about a 0.5 between students' high school and college GPAs, high school averages for all students appear to place them safely within a 2.9-3.2 UW GPA range.

In general, stop-outs differed from those who were retained in their respective ethnic groups by about a 0.10 gap between their high school and UW GPAs, except for Latino students. Latino stop-outs experienced a smaller gap in the first year (0.04) and, in the second year, they had higher average high school GPAs (3.60) than did Latino students who were retained (3.57). As the table shows, Black students who stopped out in the first or second year had lower high school GPAs (3.22 and 3.24, respectively), on average, than other ethnic groups. In contrast, Black students who were retained had average high school GPAs of 3.33. Students with three or more ethnicities who stopped out also had lower average high school GPAs than most other groups (3.31 and 3.34), while the average high school GPAs of those who were retained was 3.48. The average high school GPAs of Latino stop-outs (3.53 and 3.60) were comparable to those for Asian American stop-outs (3.52 and 3.55). However, the high school GPAs of those who were retained in these two groups differed, with averages for Latino students at 3.57 and those for Asian American students at 3.67. For White students, the gap between the averages of those who stopped out (3.61 for first-year White stop-outs and 3.59 for those who left in the second year) and those who were retained (3.68) ranged from 0.07 in the first year to 0.09 in the second.

Table 15. High school GPA by ethnicity and stop-out status

		N	Mean	SD	Lower	Upper
URM Black	Stop-out: First Year	141	3.44	.35	3.38	3.50
	Stop-out: Second Year	129	3.42	.38	3.35	3.48
	Retained	1,330	3.50	.38	3.48	3.52
	Overall	1,600	3.49	.38	3.48	3.51
Latino	Stop-out: First Year	23	3.22	.38	3.06	3.39
	Stop-out: Second Year	33	3.24	.40	3.09	3.38
	Retained	328	3.33	.44	3.29	3.38
	Overall	384	3.32	.44	3.28	3.37
Native American	Stop-out: First Year	37	3.53	.36	3.41	3.65
	Stop-out: Second Year	27	3.60	.23	3.51	3.69
	Retained	351	3.57	.32	3.54	3.61
	Overall	415	3.58	.32	3.55	3.61
Pacific Islander	Stop-out: First Year	19	3.41	.37	3.23	3.59
	Stop-out: Second Year	25	3.45	.39	3.29	3.61
	Retained	151	3.54	.33	3.49	3.59
	Overall	195	3.52	.34	3.47	3.57
Mixed: URM Ethnicities	Stop-out: First Year	Low n	Low n	Low n	Low n	Low n
	Stop-out: Second Year	Low n	Low n	Low n	Low n	Low n
	Retained	80	3.49	.42	3.40	3.58
	Overall	97	3.47	.39	3.40	3.55
Three or more ethnicities	Stop-out: First Year	44	3.49	.31	3.40	3.59
	Stop-out: Second Year	34	3.45	.40	3.31	3.59
	Retained	377	3.58	.35	3.54	3.61
	Overall	455	3.56	.35	3.53	3.59
White	Stop-out: First Year	Low n	Low n	Low n	Low n	Low n
	Stop-out: Second Year	Low n	Low n	Low n	Low n	Low n
	Retained	43	3.48	.30	3.38	3.57
	Overall	54	3.46	.31	3.38	3.54
Asian American	Stop-out: First Year	862	3.61	.28	3.59	3.63
	Stop-out: Second Year	703	3.59	.33	3.57	3.62
	Retained	10,073	3.68	.29	3.67	3.69
	Overall	11,638	3.67	.29	3.67	3.68
Mixed: Non-URM Ethnicities	Stop-out: First Year	217	3.52	.31	3.48	3.56
	Stop-out: Second Year	214	3.55	.29	3.51	3.59
	Retained	4,397	3.67	.28	3.66	3.68
	Overall	4,828	3.66	.28	3.65	3.66
Unknown	Stop-out: First Year	57	3.55	.28	3.48	3.63
	Stop-out: Second Year	37	3.53	.29	3.44	3.63
	Retained	656	3.65	.27	3.63	3.67
	Overall	750	3.64	.28	3.62	3.66
	Stop-out: First Year	181	3.60	.29	3.56	3.64
	Stop-out: Second Year	154	3.52	.34	3.47	3.58
	Retained	2,299	3.63	.31	3.62	3.64
	Overall	2,634	3.62	.31	3.61	3.63

We found it interesting that although there were differences among ethnic groups, the spread between the highest average high school grade point average (3.67 for White students) and the lowest average high school GPA (3.32 for Black students)—was only 0.35. Another interesting observation was that underrepresented minority students who stopped out in their first year had lower high school GPAs (3.44) than White (3.61) or Asian American (3.52) students who stopped out in the first year; however, the differences between them were still quite small (0.08-0.17).

In addition to tracking differences across ethnicities, we compared high school GPAs of residents and non-residents and discovered no discernible patterns for these two groups.

SAT Scores

We also tracked stop-out status by incoming SAT scores but would like to note some cautions in interpreting these results. Although SAT scores are often considered an indicator of college readiness, their use in determining readiness is controversial. Recent research on SAT scores argues that they predict students' past socio-economic status better than they predict students' future college performance (Rothstein, 2004).

Furthermore, some studies argue that SAT scores have little predictive value in retention. Twenty years ago, Tracey and Sedlacek (1987) tracked the relationships of noncognitive dimensions of success and SAT scores to first semester GPA and persistence through students' second year in college. The noncognitive dimensions, detailed in Sedlacek's book, *Beyond the Big Test: Noncognitive Assessment in Higher Education* (2004), were positive self concept, realistic self-appraisal, successfully handling the system, preference for long-term goals, availability of a strong support person, leadership experience, community involvement, and knowledge acquired in a field. Tracey and Sedlacek administered a noncognitive questionnaire to random samples of Black and White entrants in a predominantly White state university in 1979 and 1980. They found that while SAT scores were related to first-semester GPA, only the noncognitive dimensions predicted persistence for Black students. For White students, SAT scores predicted first semester grades and those grades predicted subsequent persistence. Later research by Sedlacek (2004) noted that noncognitive factors are important to persistence for all students.

Nevertheless, because some consider SAT scores an important indicator of students' pre-college academic experience and predictive of their first quarter college experience, we examined the relationship between SAT scores and retention for students who entered 1999 through 2003. As shown in Table 16, SAT scores varied by minority status, with lower mean SAT scores (1,062) reported for underrepresented minority students than for White (1,181) and Asian American (1,121) students. Among underrepresented minority students, Black students tended to have the lowest average combined SAT score at 981, followed by Pacific Islander (1,051), Latino (1,059), Native American (1,095), and multiracial underrepresented minority (1,109) students.

Moreover, there were noticeable differences in the SAT scores of Asian American and White stop-outs and retained students, but not between stop-outs and retained underrepresented minority students. For Asian American and White students, first-year stop-outs had the lowest average scores, second-year stop-outs had higher scores, and retained students had the highest SAT scores. Underrepresented students' SAT scores did not follow this pattern. For underrepresented minority students, those who stopped out in their second year had lower SAT scores than scores for either the first-year stop-outs or for students who were retained.

Table 16. SAT scores by stop-out status and ethnicity

		N	Mean Combined	SD Combined	Mean$_{SATVerbal}$	Mean$_{SATMath}$
URM Black	Stop-out: First Year	125	1,058	152	527	532
	Stop-out: Second Year	124	1,030	159	514	517
	Retained	1,252	1,067	177	533	534
	Overall	1,501	1,062	173	531	532
Latino	Stop-out: First Year	22	1,000	152	483	517
	Stop-out: Second Year	31	966	155	495	471
	Retained	309	982	177	495	486
	Overall	362	981	172	494	487
Native American	Stop-out: First Year	31	1,016	142	499	516
	Stop-out: Second Year	26	1,022	117	498	524
	Retained	332	1,068	177	534	533
	Overall	389	1,059	171	529	530
Pacific Islander	Stop-out: First Year	Low n	Low n	Low n	Low n	Low n
	Stop-out: Second Year	25	1,088	165	543	545
	Retained	137	1,097	150	546	551
	Overall	175	1,095	146	544	551
Mixed: URM Ethnicities	Stop-out: First Year	Low n	Low n	Low n	Low n	Low n
	Stop-out: Second Year	Low n	Low n	Low n	Low n	Low n
	Retained	76	1,056	165	508	548
	Overall	91	1,051	169	508	543
Three or more ethnicities	Stop-out: First Year	42	1,101	144	561	539
	Stop-out: Second Year	33	1,038	170	520	518
	Retained	356	1,117	161	559	558
	Overall	431	1,109	162	557	552
White	Stop-out: First Year	Low n	Low n	Low n	Low n	Low n
	Stop-out: Second Year	Low n	Low n	Low n	Low n	Low n
	Retained	42	1,171	152	572	599
	Overall	53	1,166	144	572	595
Asian American	Stop-out: First Year	807	1,147	142	569	578
	Stop-out: Second Year	655	1,168	143	578	589
	Retained	9,686	1,184	145	587	597
	Overall	11,148	1,181	145	586	595
Mixed: Non-URM Ethnicities	Stop-out: First Year	208	1,059	180	502	557
	Stop-out: Second Year	210	1,063	172	501	562
	Retained	4,299	1,127	167	532	596
	Overall	4,717	1,121	170	529	592
Unknown	Stop-out: First Year	57	1,092	142	537	555
	Stop-out: Second Year	35	1,108	154	545	563
	Retained	644	1,174	148	575	598
	Overall	736	1,165	150	571	593
	Stop-out: First Year	164	1,154	144	572	582
	Stop-out: Second Year	131	1,160	165	562	597
	Retained	2,066	1,176	153	571	605
	Overall	2,361	1,174	153	571	603

UW GPA

As noted above, students from all ethnic groups entered the UW with very similar high school GPAs and, further, high school GPAs did not differ according to future stop-out status. However, we saw a different pattern for UW GPA. Although retained students from all ethnic groups showed a moderate, matching decline from high school to UW GPA, the grades of students who left the UW differed quite a bit by ethnicity, suggesting that the UW experience for underrepresented minority students differs from that for White and Asian American students.

Table 18 shows that average first-year UW GPAs for Black students (2.77), Pacific Islander students (2.79), Native American students (2.81), students with three or more ethnicities (2.87), Latino students (2.97), and multiracial underrepresented minority students (2.96) were lower than the average UW GPAs for White (3.16) and Asian American students (3.04). Furthermore, an association between mean UW GPA and stop-out status was evident across all student groups. In other words, students who were retained tended to have higher UW GPAs than students who stopped out.

To gain a better understanding of the first-year drop in GPA, we compared change between students' high school and UW GPAs for first- and second-year stop-outs to that of retained students for all ethnicities, as well as for URM subgroups (Figures 8 and 9, respectively). One over-arching finding is that there is an overall decline in GPA between high school and first year of college for all students. In fact, even for students who were retained, the GPA loss between high school and their last quarter of enrollment averaged about 0.48—a decrease that many faculty and administrators believe is predictable for most students.

The figures also show that non-retained students (both first- and second-year stop-outs) experienced a greater GPA drop—1.08 on average across the entire sample—than did retained students. This difference held for all ethnic categories, but was more pronounced for underrepresented groups.

The most striking differences between the different ethnicity categories was in the gap between high school GPA and first-year college GPA among students who stopped out after the first year. Native American stop-outs averaged a drop of 1.93 grade points; Black first-year stop-outs averaged a loss of 1.69 grade points; Asian American first-year stop-outs averaged a loss of 1.41 grade points; and Latino students who stopped out in their first year had a gap of 1.27 grade points between their high school and first-year GPAs. Multiracial underrepresented minority students who stopped out during their first year lost an average of 1.35 grade points, while multiracial non-underrepresented minority stop-outs lost an average of 1.21 grade points. In contrast, White students who left in their first year lost only 1.00 grade point, on average. Pacific Islander students and students with three or more ethnicities were too few in number to estimate their average GPA drops.

Among second-year stop-outs, differences in GPA loss were less marked across ethnicities than for students who left after their first year. The highest average observed gap between students' high school and first-year college GPA was 1.01 among Asian American students and the lowest gap for second-year stop-outs was in Black students (0.74).

Two possible explanations for differences in UW GPA among groups are differences in students' high schools of origin and GPA as an interacting variable.

Table 18. Average first-year UW GPA by stop-out status and ethnicity

		N	Mean	SD	Lower	Upper
URM Black	Stop-out: First Year	138	1.97	1.03	1.80	2.14
	Stop-out: Second Year	129	2.61	.65	2.50	2.73
	Retained	1,330	3.01	.50	2.98	3.03
	Overall	1,597	2.88	.65	2.85	2.92
Latino	Stop-out: First Year	22	1.56	.81	1.20	1.92
	Stop-out: Second Year	33	2.49	.67	2.25	2.73
	Retained	328	2.87	.51	2.82	2.93
	Overall	383	2.77	.63	2.71	2.83
Native American	Stop-out: First Year	36	2.25	.93	1.94	2.56
	Stop-out: Second Year	27	2.70	.45	2.52	2.88
	Retained	351	3.07	.47	3.02	3.12
	Overall	414	2.97	.58	2.92	3.03
Pacific Islander	Stop-out: First Year	18	1.49	.93	1.02	1.95
	Stop-out: Second Year	25	2.65	.85	2.30	3.00
	Retained	151	2.99	.49	2.91	3.07
	Overall	194	2.81	.74	2.71	2.92
Mixed: URM Ethnicities	Stop-out: First Year	Low n	Low n	Low n	Low n	Low n
	Stop-out: Second Year	Low n	Low n	Low n	Low n	Low n
	Retained	80	2.89	.49	2.78	3.00
	Overall	97	2.79	.62	2.67	2.91
Three or more ethnicities	Stop-out: First Year	44	2.14	1.15	1.79	2.49
	Stop-out: Second Year	34	2.68	.62	2.47	2.90
	Retained	377	3.09	.47	3.04	3.14
	Overall	455	2.96	.66	2.90	3.02
White	Stop-out: First Year	Low n	Low n	Low n	Low n	Low n
	Stop-out: Second Year	Low n	Low n	Low n	Low n	Low n
	Retained	43	3.05	.61	2.86	3.24
	Overall	54	2.87	.78	2.66	3.08
Asian American	Stop-out: First Year	813	2.62	.96	2.55	2.68
	Stop-out: Second Year	702	2.81	.63	2.77	2.86
	Retained	10,073	3.23	.45	3.22	3.24
	Overall	11,588	3.16	.54	3.15	3.17
Mixed: Non-URM Ethnicities	Stop-out: First Year	205	2.11	1.02	1.97	2.25
	Stop-out: Second Year	214	2.54	.79	2.43	2.65
	Retained	4,397	3.12	.49	3.10	3.13
	Overall	4,816	3.04	.59	3.03	3.06
Unknown	Stop-out: First Year	53	2.35	1.05	2.06	2.64
	Stop-out: Second Year	37	2.70	.67	2.47	2.92
	Retained	656	3.15	.49	3.11	3.19
	Overall	746	3.07	.60	3.03	3.11
	Stop-out: First Year	171	2.67	.90	2.53	2.81
	Stop-out: Second Year	153	2.75	.73	2.63	2.86
	Retained	2,299	3.21	.49	3.19	3.23
	Overall	2,623	3.15	.56	3.13	3.17
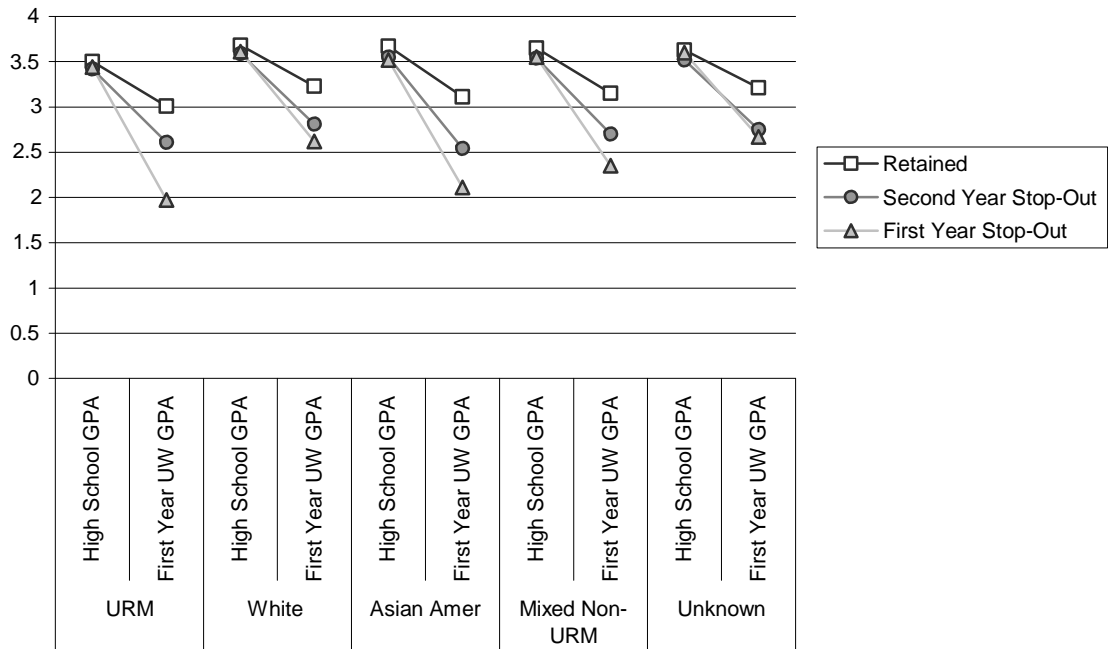
Figure 8. Average difference between high school GPA and UW GPA as of the end of the first year of enrollment, according to retention status and ethnicity category
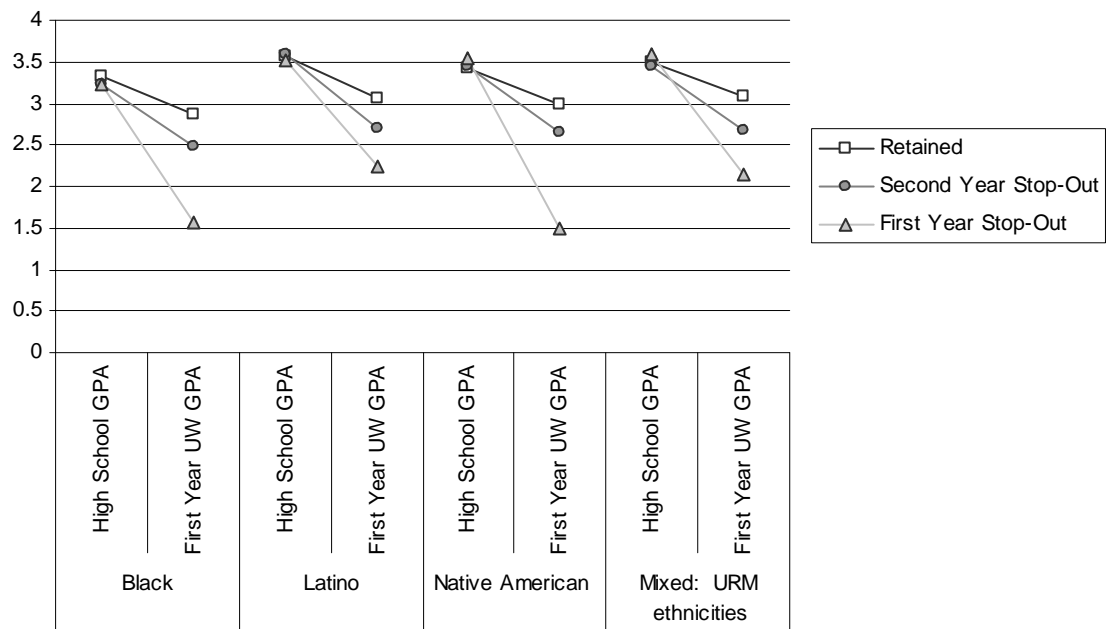
Figure 9. Average difference between high school GPA and UW GPA as of the end of the first year of enrollment, according to retention status and ethnicity category (breakdown of URM category)

High Schools of Origin

Much has been written about the wide range of academic experiences offered by various high schools across the nation. In Washington State, high schools have varying levels of funding, staffing, parental support, and access to technology.

Tracking funding levels for Washington high schools poses challenges, but we can track the percentage of students coming from high schools with a large number of students receiving free or reduced lunch. This measure provides a rough indicator of the funding needs of schools; those schools with 30% or more students receiving free or reduced lunch tend to have less funding than schools with a smaller percentage of students eligible for lunch assistance.[29] We were able to access high school data for 2006, and matched the schools on the 2006 list with the high schools of students in our study who entered the UW from 1999 through 2003. As Table 17 shows, close to 27.5% of the stop-outs came from high schools where 30% or more of the students received free or reduced lunch in 2006, while fewer than one-in-five (18.5%) of the retained students came from such high schools. Because the list of schools with high percentages of students receiving free or reduced lunch changes somewhat from year to year, these results are only suggestive.

This result suggests that UW stop-outs come from high schools that have funding needs more frequently than students who were retained. Clearly further research on students' high schools of origin needs to be done before we can determine the impact of those institutions on students' UW experience.

Table 17. Percentage of Stop-outs at 30%+ Free/Reduced Lunch High Schools

	Stop-outs		Retained	
	Count	Percentage	Count	Percentage
Less than 30% free/reduced lunch	1,435	72.5	12,353	81.5
30% or more free/reduced lunch	544	27.5	2,804	18.5
Total	1,979	100.0	15,157	100.0

To summarize this interpretation of the role academic performance plays in attrition, one possible explanation for why students within some ethnic categories experience more precipitous drops in GPA between high school and their first year is that their high school academic experiences did not provide them with adequate expectations for the rigors of the UW. The large drops in GPA then put these students at high risk for attrition.

GPA as an Interacting Variable

Without additional data about the curricula of different high schools of origin, it is impossible to determine whether high school of origin is the primary causal factor in the differential grade gaps seen across ethnicity categories. In fact, examination of GPA data during the first year at UW points to a larger analytical issue for considering the role of academic performance in attrition. In a sense, academic performance and retention are so inextricably linked that to consider all of the factors that might affect a student's performance in the first year is almost the same as asking what causes a student to be retained or not. In other words, GPA is as much a reflection of all of the other factors that cause attrition as it is a causal factor in and of itself.

This interpretation follows from the fact that students must leave the UW if their GPA drops below a certain threshold. In addition, all of the factors that are identified within this report as possible causes of attrition could also be causes for lowered GPA. For example, if the academic climate is not welcoming, it will be difficult for students to succeed academically. Similarly, if families' expectations do not fit within the academic culture of the University, it will be difficult for students to obtain good grades in classes. From this perspective, changes in high school to college GPA

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[29] Information on free and reduced student lunches was provided to OEA by the Admissions Office.

indicate more than how well high schools have prepared their students academically. Instead, GPA might act as a mediating variable in the causal relationship between all of the other factors identified in this report and attrition, in that the other factors could cause declines in GPA, which would then cause a student to leave the UW.

With this interpretation in mind, the findings suggest a stronger relationship between first-year GPA and attrition in the first year than between GPA and attrition in the second year. Hence, grades may play a more prominent role in students' decisions to leave the UW in their first year than they play in students' second year. In addition, the interaction of other factors that might particularly affect underrepresented minority students' grades—such as campus climate or hesitancy in seeking help—may be more pronounced in the first year than in the second.

Waiting/Being Embarrassed to Ask for Help

About 40% of the faculty and staff we interviewed, but none of the students, said that underrepresented students' reluctance to ask for help—often until it was too late for those working with students of color to provide it—was a factor in students leaving the UW. As one staff member put it:

> *"Students don't say, 'Hey I'm flunking. Hey I'm out of money.' The majority of students are having so many issues that they will try to take it as far as possible. When they leave, it's because they just can't make it any further."*

As noted by the UW Study of Undergraduate Learning (Beyer, Gillmore, & Fisher, 2007), many, if not most, entering students are afraid to ask questions in class or to seek help outside class. As a group, freshmen have unrealistic expectations about what they should already know when they arrive, and they are often embarrassed to reveal ignorance about navigating the University or understanding course materials.

However, in addition to entering with the normal burden of fear of exposing ignorance that other freshmen bring to the UW, underrepresented students are dealing with climate issues. Asking for help in class means bringing the spotlight toward themselves; asking a question or asking for help outside class—not knowing the answer already—might reflect badly on their ethnic communities, reinforcing the idea that they do not belong at the UW.

The interactions of these other factors with the generalized fear of revealing what they do not know, which most freshmen feel, likely make it harder for underrepresented minority freshmen to ask for help than for other students to do so.

Work-Related Issues

About a third of the faculty and staff we interviewed mentioned work-related issues as factors in underrepresented minority students' decisions to leave the UW. This issue was closely connected to financial issues discussed earlier, and students who mentioned work issues spoke of them in relation to broader financial matters. But the focus for the faculty and staff who raised the issue of work was on *where* students went to work and on *how many hours* they needed to work to support themselves in school. As noted in the "Background" section of this report, national and regional data on retention suggest that underrepresented students work more hours than White or Asian American students, and that they are working primarily to pay for college costs.

Faculty and staff pointed out that when work demands combine with financial realities—such as parents being unable to help with finances and unemployment rates among some groups being higher than for others—students' academic work often suffers, causing them to leave. Furthermore, faculty and staff noted that students of color often commute long distances to jobs off campus, sometimes to jobs they have held since high school, and that the commuting time puts them at both an academic and a financial disadvantage. It also removes them from campus for long periods of time, affecting social networks and participation in extracurricular academic events.

Not Getting into One's Major of Choice

Faculty, staff, and students noted that not getting into one's major of choice or experiencing delays in getting into a major often influenced underrepresented students' decisions to leave the UW. While this may be a problem for all students, interviewees noted that when this problem is experienced in combination with others, such as extreme financial pressures or feeling unwelcome at the UW, it can cause underrepresented students to leave.

Other Causes

A few faculty and staff members also mentioned that students sometimes feel stigmatized by the EOP label, including being required to take courses that other students were not required to take (English 104/105, for example) or obtaining services from OMA/D. Finally, some faculty, staff, and students reported that students also left the UW for a variety of personal reasons.

CONNECTIONS BETWEEN UNDERREPRESENTED MINORITY STUDENT AND UNDERREPRESENTED MINORITY FACULTY AND STAFF EXPERIENCES

Although we did not ask them directly, faculty, staff, and students all pointed out that faculty and staff experience some of the same pressures that underrepresented students experience at the UW. Issues for students that were also felt by faculty and staff included:

- A sense of isolation because of critical mass issues
- The need for support from chairs and administrators for their work and approaches to teaching
- The need to analyze interactions every day to determine if they are motivated by racial assumptions or merely the result of someone's general insensitivity to others
- The feeling that they are carrying their entire race into situations in which they will be judged
- Pressure from family and community to be true to their cultures of origin
- Commitment to their communities, which often means they are mentoring and advising many students of color, representing faculty and staff of color on a number of UW committees, and planning and participating in greater Seattle community activities that affect students of color—the sense that because they are minority faculty and staff they have two jobs that they care passionately about

Four quotations illustrate this connection in issues facing faculty, staff, and students of color:

"[Students of color] are too important to the community to not finish, so when I lose one, it is horrible. It is a tough place to be in, because I feel responsible for the place they are in."

"This week—I have two GO-MAP events, and Thursday, I have this dinner. My White colleagues don't have that. So that's a dilemma we are in. I appreciate this position, and it's sort of the nature of what I have gotten myself into. I just hope I can be successful in my work. And I think that is the same issue for students of color here. They are active in the Black Student Union and other organizations, but they want to do well academically here too."

"And I don't think my dean understood why I couldn't say no—that your community is not going to get another shot."

"People in Minority Affairs go so far above and beyond their job descriptions—meet students for lunch, support their projects, keep in touch with their parents or caregivers. It is amazing how people give and give of themselves above and beyond what should be expected of them."

The Special Committee on Minority Faculty's open letter to President Mark Emmert noted some of these problems in February 2005.

WHAT HELPS RETAIN STUDENTS

When we asked interviewees what they thought helped students stay resilient in the face of the issues that might cause them to consider leaving the UW, faculty, student, and staff responses echoed some of Sedlacek's research (2004) on noncognitive predictors of retention, and Tinto's (1993) ideas about the importance of meaningful connections. Sedlacek's research on retention suggests that for all students and particularly for underrepresented minority students, persistence is related to noncognitive as well as cognitive factors. In other words, getting high grades may be less important to a student's persistence than her positive self-concept in relation to her own expectations for her future or her ability to deal with racism. As noted previously, Sedlacek has spent many years researching the relationship of eight noncognitive variables to student persistence (2004, p. 37), including:

- Positive self-concept
- Realistic self-appraisal
- Successfully handling the system (racism)
- Preference for long-term goals
- Availability of strong support person
- Leadership experience
- Community involvement
- Knowledge acquired in a field

Faculty, staff, and students identified three key reasons for students' persistence, and students added a fourth. First, about 35% of the faculty and staff, as well as a large number of students, said that family support and family pressure to continue kept students in school. In other words, while family needs and expectations can influence a student to leave college, support from families can powerfully influence students to stay. As one interviewee said:

"Parental guidance at an overarching level, having that parental information mitigating all of these other things, supporting these other things they go through."

Regarding the importance of families, students also noted that a sense of commitment to their families and communities helped keep them in college, as this student said:

> *"I find motivation in helping my family and being a role model for nieces and nephews and being able to help my tribe."*

Second, about a third of the faculty and staff and a number of students noted that connections with faculty, staff, and peers often keep students in school. One person put it this way:

> *"And in the end what seems to have gotten them through is a close connection to one another, the sense that their families are closely connected, and usually there is at least one representative of the University who is closely connected to them as well. So on a campus of this size, it still comes down to how and when we form relationships with them and the depths of those relationships."*

Students agreed, noting that having someone on campus who believes in them and shows concern, such as a faculty or staff member, helps them persist in spite of the challenges they face. One student described his experience:

> *"In the beginning it wasn't that great, but then it just got better and better. A staff member told me that I could do well here and I was like 'if he thinks I can do well, then maybe I can.' It really helped me."*

Furthermore, students in several of the focus groups pointed to the importance of OMA/D's Ethnic Cultural Center (ECC) and Instructional Center (IC) in providing them with places where they could make important connections with UW staff members and other students. Both the ECC and IC and their staffs were cherished by all the students with whom we spoke.

The importance of students' connections with faculty, staff, and peers is well supported by the literature on retention (Tinto, 1993). However, forming meaningful connections with faculty, staff, and peers may be harder for underrepresented students than for other students, due to their sense of isolation on the UW campus.

Third, about a fourth of the faculty and staff interviewed noted that the students' own motivation, desire, and will pulled them through school. These personal attributes and others are well-documented by Sedlacek (2004).

Students added a fourth reason for persistence: involvement in community-based activities, also one of Sedlacek's "noncognitive variables" for assessing and predicting student performance (2004). Even though students noted that being involved in campus and community activities sometimes led them to overextend themselves and thus earn lower grades, they also said that such involvement helped them persist in college. They stated that being involved in campus groups and organizations and participating in community events gave them a sense of belonging and purpose, which in turn helped them continue on their educational paths.

Other causes for persistence mentioned by interviewees were:

- Active intervention by faculty or staff members on campus, described by one interviewee as *"All the major units operating at that same capacity that OMA does"*
- Knowing better what to expect at the UW before they arrive

- A strong sense of their own ethnic identity and commitment to social change
- A strong academic and social support system on campus
- A combination of their own will and the availability of resources to help them, described by one staff member as follows:

"Students come in here with a range of personal resources. Some students will persist no matter what. Some students have some resources and strengths, but when their out-of-school factors reach a critical point, they are going to drop out. They need some more support than they are getting. And a lot of those students are very very unhappy that they can't finish their educations. But they're caught. Everyone can point to people who persist no matter what, but most of us are lower down on the resources. If enough bad factors happen we are going to drop out."

- An academic goal that they care passionately about—something that keeps them here, stated by an interviewee as:

"What they are doing intellectually, what they are able to do at the end point of that has meaning. If people can see a reason why they are doing stuff, it matters."

RETENTION CONSIDERATIONS FOR SPECIFIC POPULATIONS

We asked interviewees whether they thought there were differences among the underrepresented minority groups at the UW—Black, Latino/Latina, Native American, and Hawaiian /Pacific Islander students. We also asked them about students from multiracial backgrounds. As noted earlier, multiracial students represent a sizeable proportion of the UW's undergraduate minority population, but often we assume that the experience of mixed students is identical to that of underrepresented minority students. Finally, because the category of "Asian American" students sounds homogenous but is, in fact, extremely diverse, we asked faculty to speak about differences among Asian American student populations.

Although faculty and staff often asserted that the specific pressures experienced by different groups were not the same, they noted that for every group challenges were more severe for first-generation college students than for students whose parents went to college. In addition, several pointed out that differences within groups may be more pronounced than differences among them. As one faculty member said:

"A Black student who comes from Garfield High School and another who comes from a high school in Atlanta—those two students might be very different."

Black Students

Many faculty and staff noted that Black students may feel more isolated at the UW than other underrepresented minority students. As one staff member said:

"Among African Americans it's about feeling isolated—about there being not enough African Americans in the institution, so it's about the climate, having a sense of community."

The conversations we had with students also focused heavily on the fact that Black students felt isolated and got the message that they did not belong at the UW. These students discussed the ways in which the classroom and larger campus environments were uncomfortable and unwelcoming.

In addition, several people noted that family expectations for financial help may strongly influence Black students' academic success. Finally, several staff and faculty members noted differences between Black students' experience at the UW and the experience of African immigrants. They noted that African immigrants may be subject to climate issues similar to those for Black students, but that their family expectations and history in the U.S. make their experience at the UW somewhat different from those of Black students.

Latino/Latina Students

According to faculty and staff, two issues seem to affect Latino students particularly strongly. The first is that the family-centered nature of Latino culture sometimes puts pressure on students to meet family needs before the demands of their academic work. As one staff member said:

> *"Many Latino students come from big extended families where there are expectations that students are going to work and help the families. Also families are especially fearful of their kids getting far from them, going to a place like the UW. There are stories about bad things that happened to students who came to a place like this."*

Second, Latino students who come from eastern Washington may have a particularly hard time at the UW, because, as one faculty member put it, "Coming west of the mountains is like entering another state"—a state that does not share the culture of eastern Washington Latino families and communities.

Students echoed faculty and staff comments regarding family and distance from home as particularly salient issues for Latino students. Students also noted that many of the materials the UW sends out are in English only and, thus, their families get the message they are not accepted or welcomed.

Native American Students

Several staff and faculty members felt that the UW was a "more alien" place to Native American students than to other underrepresented minority groups. As one staff member said:

> *"There is a real strong cultural divide. Their sense of their tribal identities and their families means a great deal more to them than is commonly known."*

There are so few Native American students at the UW that isolation is also an important influence on these groups of students. Students we spoke with mentioned the lack of a critical mass of Native students, faculty, and staff as a major issue. Additionally, students noted that their commitment to their communities and families was important to them and that the University's expectations and norms often differed from their cultural norms and values.

Hawaiian/Pacific Islander Students

Faculty and staff remarked that many students from the Pacific Islands are far away from family, and Pacific Islander culture is family- and relationship-oriented. Therefore, these students may face significant challenges due to homesickness and the feeling that they are not participating as fully as they should in family and financial matters at home. Pacific Islander students who are living close to home may also experience some of these feelings.

Multiracial Students

Many people with whom we spoke noted that multiracial students experienced powerful identity issues in college. As one faculty member put it:

> *"College comes at a time when these students are having their most powerful ethnic identity experience, how to get situated in a community—and in some ways we have become a bifurcated campus that doesn't leave a home for mixed students."*

As multiracial students seek to understand their own ethnic identities, faculty noted that they are often pressured to "pick a side." Indeed, some interviewees felt that picking one part of their ethnic backgrounds with which to identify helped multiracial students:

> *"Once they decide on one culture or another it seems to be easier for them. It might be a betrayal of one culture or another, but it is one walk, one path."*

Another staff member pointed out that many multiracial students were active in student groups that represented their underrepresented ethnicities. However, this is not an easy road for multiracial students, as one faculty member noted:

> *"What a choice to have to make! Will I be in the Black student group? In the mixed group? In the White group? What will I have to give up to be in one or the other?"*

Another faculty member pointed out:

> *"I guess being categorized by others as one race or other is the biggest problem. My [multiracial] sons tell me that."*

In addition to complex identity issues, faculty and staff noted that sometimes multiracial students feel judged and rejected by monoracial students. As one staff member said:

> *"If they are mixed black and white, the blacks don't want to accept them and the whites don't want to accept them, so they are kind of in limbo."*

Students with whom we spoke also discussed the identity development process they face during college. Multiracial students noted that they often have a hard time finding a place where they "fit" because the UW is fairly segregated. Students suggested the UW do more to provide and encourage social activities that bring different ethnic groups together.

Some respondents pointed out that Asian American/White mixed students seem to have less trouble with acceptance than other multiracial students; however, they may still experience identity issues similar to those of other minority students.

Finally, several faculty members noted that consideration of the particular identity needs of multiracial students was new for the UW, and that there may not be enough people on staff with the expertise to work effectively with this increasing population of students.

Asian American Students

Nearly all faculty and staff with whom we spoke pointed out that the category of "Asian American students" was too monolithic to be informative. They agreed that there were real differences between Japanese- and Chinese-American students—many of whom were born to families who have been in the U.S. for generations—and Cambodian, Vietnamese, Hmong, and Laotian American students, who are often first generation college students from immigrant families. As one faculty member said:

> "You look at these kids and think that this is our misunderstanding of the Asian experience in the University. We are just looking at quantifiable data, and missing the nuances in the qualitative experience of students. Why did they come here? When did they come here? What was their status when they came here, the lens through which they saw the world when they came here? That lumping of the Hmong student who comes from Holly Park in Seattle with that Japanese American student is simply inaccurate. We have to note those differences."

Some of the differences among these two groups that faculty identified were that southeast Asian students were more likely to come from families with less access to jobs, education, and money; were less likely to speak out in class; may have less support from their families for academic pursuits; were less well-prepared and "shocked when they get here" by academic demands; and may struggle more with ESL issues than do other Asian American students.

Several faculty and staff members pointed out that many Asian American students explore their ethnic identities when in college, even if they have been in the U.S. all of their lives. Several people also noted that Filipino students—often classified as "Asian American students" and sometimes as "Pacific Islanders"—seem to face issues common to both groups.

Transfer Students

Faculty and staff noted that underrepresented minority transfer students may be better prepared to do well at the UW because they are not as focused on social needs as incoming freshmen. This difference allows them to concentrate on academics right from the start. Also, faculty and staff pointed out that this group appears to know that they have a right to ask questions and to talk with faculty. As one interviewee pointed out:

> "They have had their ideas challenged, have had to defend their thinking, and they don't need to spend all that time in backlog to get at where their ideas come from."

However, faculty and staff also observed that there are financial problems that transfer students may experience more acutely than students entering as freshmen. There are fewer scholarships available for transfers, for example, and the financial aid set-up makes it difficult for transfers entering the UW in winter, spring, or summer quarters to access aid.

Gay/Lesbian/Bisexual/Trans-sexual/Queer (GLBTQ) Students of Color

Several staff members noted that GLBTQ students of color have issues that are somewhat different from White GLBT students. Acceptance of being gay or lesbian, for example, may differ across cultures.

ESL Students

A few of the faculty and staff we interviewed said that non-native English speakers have special challenges at the UW. As one faculty member said:

> *"I think that in a big place like this it's harder to get support for and individual attention for whatever it is your needs are. Also the University—I've talked with people in the ESL program—and the substructure is such that we are being encouraged to not give compensation to non-native speakers—no extra time on exams, no extra help in writing. They have to go outside the class and outside the discipline sometimes for help with those things. In the sciences, writing is very tailored to the discipline's needs, so going to a different writing center may not give students the help they need."*

First Generation College Students

In general, first-generation college students have a difficult time knowing what kinds of confusion or performance problems are "normal," and they may be more afraid to ask for help than are other students. However, a few staff members noted that immigrants who are the first generation in their families to go to college may be more persistent than underrepresented American minority students.

FACULTY, STAFF, AND STUDENTS' IDEAS FOR CHANGE

In the course of our conversations, faculty, staff, and students offered suggestions for change. These suggestions did not always emerge as a result of a direct question. In addition, as was the case with causes for underrepresented minority attrition, faculty and staff perspectives sometimes differed from those of students. We have tried to report all suggestions given, whether they represent the views of single individuals or were mentioned more than once.

Student Suggestions

Students offered the following ideas for improving climate and other factors that may interact with climate:

- Hire a critical mass of faculty and staff on campus to work with students and raise awareness of issues.
- Develop more activities to bring students together; provide more opportunities for social networking with diverse groups of people.
- Offer more small classes so students can connect with peers and their professors.
- Do more outreach to students when they first get here—more mentor programs.

- Recruit students more effectively; go to underrepresented minority students' communities, churches, and events where parents and students' support networks also reside.
- Locate the Ethnic Cultural Center more centrally and conveniently for students.
- Increase the number of ethnic fraternities and sororities.
- Build a longhouse for Native students to meet in, as Stanford has done.
- Increase the size and staff of the Instructional Center.

Faculty and Staff Suggestions

Faculty and staff offered the following ideas to improve climate and related factors. Please note that the first five ideas included were given by several of the 40 faculty and staff whom we interviewed:

- Consider ways in which the University can support underrepresented minority students in their use of financial aid services.
- Create a child care center for student parents.
- Continue to focus on advising services as an important component in the retention of underrepresented minority students and ensure that underrepresented minority students see departmental advisors early in their academic programs.
- Forge better and deeper connections between UW administration and departments and underrepresented students' families and communities.
- Speak with students who left the UW about their reasons and what might have been done to help them stay.
- Allocate "dorms"/housing for transfer students and/or older students.
- Help families understand what it takes for their children to succeed at the UW.
- Create more and better mentoring programs.
- Expand the Instructional Center.
- Make OMA more central to the campus geographically.
- Create better connections with K-12 to improve the "pipeline."
- Improve the reward system for faculty of color to take their community work into account.
- Create more opportunities for student voices to be heard on these issues.
- Expand and extend opportunities for underrepresented students to do research and study abroad.
- Convey the message to all students that they matter to us and to society. As one staff member said:

  "We need to continue to emphasize to students that they have talents, that they have much more to offer than they think they have. I don't think we say that enough to our students—that there is a world of possibility for them if they follow the right steps, make use of support systems, and apply themselves. I tell new students that they could be the next person who discovers a cure for cancer or AIDS. There is so much they could accomplish that they can't see now."

- Pair up every incoming underrepresented student with a junior or senior, who can help the student navigate difficult college situations.
- Applaud students who are at the "middle level."

- Require all students to participate in the Intergroup Dialogue process.

- Give all students mid-quarter feedback, so they know where they stand in their classes.

- Consider ways in which UW Housing can and does contribute to students' sense of belonging.

- Publicize when students are doing well, particularly to communities of color.

- Create Instructional Center satellites in targeted community centers to improve students' skills before they come to college and to increase the pipeline of underrepresented students to college.

- Value more what faculty are doing to help "get these young people where they need to be."

- Be clear about what the UW means by "beginning level"—"Beginning at a college level is more advanced than 'beginning' at other levels—beginning foreign language study, for example."

- Follow underrepresented students longer—up to 10 years—than the usual 6 years to understand persistence.

- Deepen the level of conversation on campus about race. As one faculty member said:

  "I frankly think that the conversation on campus is remarkably unsophisticated when it comes to talking about race—really recognizing and understanding the complexity of the student racial experience on campus, the intellectual complexity, the complexity of the physical environment. I have been asking students of color how much time they spend in Mary Gates Hall. I've heard people call this building 'The Big House.' Think of that!"

- Create new ways to help students understand the "language of the university." As one staff person said:

  "Part of what I try to teach the kids too is that in a sense they are becoming bicultural if they aren't already and they have to learn that the university has its own language, its own systems, its own values. If they look at it as if they are going to another country and they have to learn about it, it can be easier."

Much of what we learned about underrepresented minority students at the UW has been well-described in the literature on retention. We learned that a range of factors affect students' decisions to leave the UW, including financial need, pre-college and first-year academic experiences, the campus climate, differences between academic values and those of students' families and communities, and problems with majors. However, we also found that how these factors interact with each other is more important than the individual factors themselves. This result is important because, if the UW is to institute changes in its practices or policies to improve retention of underrepresented students, change in one area will need to be accompanied by changes in all areas.

We believe that change is important. The OEA climate surveys showing differences in how underrepresented minority students experience the UW compared with White students are now more than six years old. The underrepresented minority faculty, staff, and students with whom we spoke frequently expressed frustration with questions that they said they have answered repeatedly. As two students put it:

> *Student 1: "We have so many meetings where we say the same things over and over again and then nothing changes. It gets really tiring to regurgitate the same thing again and again and it would be nice to see some change."*

> *Student 2: "Or just know that someone is truly listening."*

With this need in mind, we present our conclusions and their related recommendations.

CLIMATE

The literature on retention of minority students makes clear that when students experience a climate that feels hostile to them, they are more likely to leave than to continue in that environment (Hurtado et al., 1999). Nearly everyone with whom we spoke at the UW mentioned climate as a problem for underrepresented minority students. Climate includes both the academic environment—how and what we teach—and the social environment—campus life—and it is expressed at least partly in students' sense of belonging at the University. A student's sense of belonging influences her level of engagement with the University. It is important to remember that campus climate is not static or monolithic. It is continuously created by faculty, staff, and administrators, as well as by the students themselves.

To begin addressing the climate issues, we recommend that the UW improve the *structural aspects* of climate in the following ways:

- Develop and implement a plan to increase enrollments of underrepresented minority students so that the ethnic diversity of the UW accurately represents the ethnic diversity in Washington State by 2012. Even though having more people of color on campus does not, in and of itself, create a welcome, inclusive campus climate, creating a critical mass of people of color on campus is an important component in improving campus climate for all students. Also, develop and implement a parallel plan to increase the number of underrepresented faculty and staff so that the ethnic diversity of the UW accurately represents the ethnic diversity in

Washington State by 2012. Consider "cluster hiring"—as recommended by the Special Committee on Minority Faculty Affairs in its 2005 "Open Letter on Diversity" to President Emmert, as well as "cluster admitting"—described in the book *The Pact* (Davis, Jenkins, & Hunt, 2002). The Department of Political Science has done this successfully.

- Hire more faculty from all ethnic groups who have a demonstrated record of working with communities of color and teaching students of color. Additionally, strive to increase the diversity of the graduate student population, which would, in turn, increase the pools of diverse individuals available to work with undergraduates and of future faculty members who are invested in diversity.

- Actively lead the UW to a multiple-level focus on diversity, including reviewing and prioritizing faculty structure and rewards so that they take service to diverse communities and research on diversity issues into account. This would help recruit and retain faculty of color.

The UW can improve *behavioral aspects* of climate in the following ways:

- Increase cross-racial interaction in class and outside class. For example, research on learning shows that study groups help students learn, provide students opportunities to socialize with a small group, and allow all individuals to express opinions they might feel uncomfortable voicing in large-class settings. When possible, faculty should assign students to course-based study groups (so that some students are not left out of groups) and give groups guidance in effective use of the group, including cross-racial dynamics. Study groups can be conducted face-to-face or via on-line discussion boards easily set up through Catalyst. Cooperative (vs. competitive) group work in and out of the classroom can facilitate a more positive campus climate.

- Increase faculty/student interaction. Providing opportunities for students to work on faculty research is one way to increase interaction. The University of Michigan offers a research program for underrepresented minority freshmen, designed to increase retention. The UW might investigate this and other programs to see if the UAA's Undergraduate Research Program could replicate effective models. This is on the agenda of the Diversity Research Institute as well.

The UW could address *psychological aspects* of climate in the following ways:

- Create more opportunities for people to interact across cultures. Interaction helps students, faculty, and staff break down stereotypes and myths about people who are different from themselves.

- Conduct campus climate assessments on a regular schedule to understand the effects of efforts to improve campus climate and to ensure that perspectives of all members of the community are heard in decision-making processes. Faculty can assess classroom climate every quarter by using the Classroom Learning Environment supplement to course evaluations, newly developed by OEA. A copy of that questionnaire is included in the Appendices.

- Guarantee that the organizations and support services created for students of color have adequate funding, staffing and other resources to serve students. For example, faculty, staff, and students all recommended that the UW enhance and expand the Instructional Center and the Ethnic Cultural Center. Both places serve as academic and social gathering places for underrepresented minority students. Additionally, the UW should ensure funding for student group events.

- Begin conversations with OMA about the pros and cons of locating OMA facilities more centrally on campus in order to address the geographical marginalization of services for underrepresented minority students.

- Hire more faculty to work specifically on diversity research. The UW has established a new Diversity Research Institute to both support faculty currently doing research on diversity and create new research areas by hiring additional scholars of diversity. Hiring more researchers and faculty would provide more resources for students and demonstrate that the UW sees this work as an important, integral field of research rather than a peripheral one.

- Provide support for faculty and departments to integrate student-centered, active-learning, and culturally relevant pedagogies into existing teaching practices. Because changes in teaching strategies are time-consuming and tricky, faculty and departments engaging in these challenges need support. In the long run, such changes will lead to the kinds of teaching practices that faculty, staff, and students noted worked best for underrepresented minority students, and, indeed, which research suggests work best for all students' learning (Bransford et al., 2000).

FINANCIAL ISSUES

Financial need and its complications for underrepresented minority students—the need to work longer hours, take out emergency loans, and contribute to family income—are likely contributors to students' decisions to leave the UW. Underrepresented minority students at the UW consistently had the fewest financial resources across the board—followed closely by Asian American students. White students had greater financial resources than either group.

As noted previously, faculty, staff, and students told us that financial need, although serious, rarely was the single impetus for leaving. While this may be the case, financial problems have implications that may lead to attrition. For example, unmet financial need may cause a student to work more hours and compromise his academic work, or the cumulative cost of college education might drive a student to quit, when she notices that she will be leaving college owing more money than her family earns in a year.

We make the following recommendations regarding our findings on financial need:

- Track the effects of the Husky Promise to determine which populations it serves and how well it meets the financial needs of student recipients.

- Systematize the on-going efforts of the Office of Student Financial Aid to provide early identification and intervention for students who are experiencing financial difficulties. Due to a lack of resources, the current process relies on students to self-identify. Provide for automatic contact from a UW representative who is sensitive to the needs and concerns of underrepresented minority students and their families. Include staff who have worked effectively with students in the past and who represent a variety of UW areas in the planning and development of such a system.

- Determine ways to ensure that financial aid packages are more grant-based than loan-heavy. Underrepresented minority students have more difficulty taking on loans than other forms of financial aid, and loans are often barriers to access for these groups of students.

DIFFERENCES BETWEEN ACADEMIC NEEDS AND FAMILY/COMMUNITY/CULTURAL EXPECTATIONS OR NEEDS

Students, staff, and faculty members noted that the families of underrepresented minority students can be the key to those students' success at the UW. Often, parents make courageous sacrifices to help their children complete college, and whole communities sometimes get behind a single student's success. However, faculty, staff, and students stated that underrepresented minority students are often under so much pressure to contribute to the well-being of their families that sometimes their academic work suffers, and they stop out. Furthermore, faculty and staff suggested that because many of the parents of underrepresented minority students have not attended college themselves, they are not always aware of how hard college is for all freshmen, socially, academically, and logistically.

In the light of these findings, we recommend the following:

- Develop more ways of communicating to underrepresented students and to their families the effort that it takes to graduate from college. A series of student-created DVDs could be produced that would be sent to students' homes when they were accepted at the UW or sometime during their first quarter at the UW. These DVDs could be developed in English and Spanish and feature underrepresented minority students talking to new UW students and their families about the UW college experience from their own perspective. They would include video clips of large lecture classes; the IC in operation, and dorm life; candid conversations from students about climate issues; interviews with underrepresented minority students who are seniors about what it took for them to succeed academically; information about financial aid and the costs of college; information about OMA from counselors and staff; images of the ECC on a busy night; and statements from leadership about the value that underrepresented minority students bring from their communities to the UW.

- Increase two-way communication between UW administration and faculty and the communities from which underrepresented minority students come. Become a strong presence in those communities so that two-way communication can occur and relationships between communities and the UW can "deepen," as one UW faculty member put it.

- Formally and informally reward faculty, staff, and students—through monetary rewards, reduced work hours, a personal acknowledgement or word of thanks from the President and Provost—whose community service work helps the UW make its commitment to diversity manifest.

- Provide information on the OMA/D and UW Counseling Centers to advisors, TAs, faculty, and others who may encounter students who are dealing with complex family-related issues, such as divorce, childcare, death, financial stress, and cultural expectations. During advisor and TA trainings, it might be useful to include a segment about how these issues can affect students during advisor and TA trainings and encourage advisors and TAs to refer students to specialists in these areas.

PRE-COLLEGE AND FIRST-YEAR ACADEMIC EXPERIENCE

Students' pre-college academic experiences are related to family finances in that students from low income families often have reduced access to educational resources early in their lives. Indeed, some researchers argue that low family income is only an issue for college attendance because of this reduced access (Cameron & Heckman, 2001). The dramatic disparities in the academic

opportunities available to students in K-12 schools located in high and low-income areas have also been well publicized.

Even when we kept those differences in mind, we noticed that when students in our 1999-2003 cohorts entered the UW, their high school GPAs differed only slightly from one ethnicity to the next. Furthermore, the similarity of these grades suggested that all students enter the UW with the reasonable belief that they should be able to succeed academically. However, at the end of their first year at the UW, some students had experienced bigger drops between the high school GPAs they entered with and the UW GPAs they earned than had other students. The bigger the drop between students' high school and first-year college GPAs, the more likely the student was to stop out.

All freshmen experience a kind of academic "shock" in their first year (Beyer, Gillmore, & Fisher, 2007), but data on gaps between students' high school and college GPAs suggest that some underrepresented minority students, and perhaps some Asian American students, experience shock that first year. The degree of shock is likely compounded by other factors, such as climate issues, financial concerns, and family expectations and needs. Therefore, while all students may experience academic shock in their first year, their experience of it differs.

Compounding the issue of academic shock, most freshmen are hesitant to ask for help, because they believe they should already know how to manage all college demands (which their high school GPAs might suggest to them). The willingness of underrepresented minority students to ask for help is likely to be negatively influenced by climate issues.

With these issues in mind, we recommend that the UW do the following:

- Use proactive methods to intervene early when students experience academic problems. If any student has experienced a grade point loss of more than 1.0 from her high school GPA at the end of their second quarter at the UW, contact the student by email and phone; schedule her for advising; give her information on OMA programs, including the IC, and other UW academic help centers; determine if she is experiencing other issues; and help her help herself. OMA and the Individualized Second-Year Advising Program already contact students in this situation, and we recommend the extension of those approaches. Another approach would be to re-implement the previously-used quarterly early warning system, in which information from faculty is gathered and used to encourage faltering students to use academic advisors and the Instructional Center (IC) for help in course-specific academic areas.

- Create a viable pathway for underrepresented minority students who left or were dropped because of academic performance to re-enter the UW and re-recruit underrepresented minority students who left the university in good standing.

- Increase the capacity of OMA's Instructional Center. This would help improve the climate for diversity at the UW and help students academically. OMA evidence shows that attendance at the Instructional Center improves students' grades in tough courses (Pitre, 2005). In addition, the Instructional Center should be given resources to expand the same supplemental instruction for gateway courses into majors that it already offers for math, chemistry, and biology.

- Create a mentoring program where older underrepresented minority students are matched with underrepresented minority students whose grades fall below 2.6 in the first quarter (a loss of about 1.0 points from a strong high school GPA).

- Consider seeking external funding for Instructional Center satellites in targeted community centers to improve students' skills before they come to college and expand the pipeline bringing underrepresented minority students to college, as suggested in the "Faculty, Staff, and Students' Ideas for Change" section of this report.

- Provide more and earlier support and preparation for underrepresented minority students to help them get into their majors of choice, particularly into those identified by students and staff as being historically "unfriendly" to underrepresented minority students. This will require the efforts of advisors, administrators, faculty, and students. An intense focus on helping sophomores navigate majors is currently offered through the Individualized Second-year Advising Program in UAA, and OMA/D offers an effective second-year outreach program, as well. The Biology department's Initiative for Maximizing Student Diversity is an example of a federally-funded departmental program aimed to help underrepresented students enter biomedical fields and become excited about research. We recommend that such outreach and support be offered to underrepresented minority students before their second year.

- Increase the number of Diversity Scholars on campus. The presence of these students can help other underrepresented minority students achieve in a number of ways, for example, by serving as role models, mentors, and peers. In addition, increasing the number of Diversity Scholars can have an impact on campus climate issues by contributing to a diverse student body.

WAITING/BEING EMBARRASSED TO ASK FOR HELP

Asking for help can be difficult for any UW freshman. However, other aspects of the college experience such as campus climate can cause underrepresented minority students to hesitate even longer to ask for help. Therefore, we propose the following:

- Create a culture inside and outside the classroom where questions are welcomed.
- Create retention intervention programs that seek out students who need help.

WORK-RELATED ISSUES

While work-related issues closely intersected with financial and climate issues, several faculty and staff members noted that being removed from campus for long periods of time because one is commuting to work can have multiple negative effects on students. With this in mind:

- Increase the number of work-study and other student positions on campus that connect with the academic programs and interests of underrepresented minority students.

NOT GETTING INTO ONE'S MAJOR OF CHOICE

Issues about majors came up on their own and also as part of campus climate concerns. In general, being rejected from one's first choice of major can propel students from any ethnic background to transfer to an institution where they can enter those majors. However, the differing second-year stop-out patterns for underrepresented minority students combined with their greater financial need suggest that these groups may have some unique needs around majors.

Connecting students with specific majors and intellectual questions they care passionately about may provide students with what one faculty member identified as "a reason for staying." In her words:

> *"What gets you through is this kind of passion for what you are doing academically. That goal at the end needs to be very meaningful. It's not just that someone is telling you that it is all right to stay. You've got to have the other as well. You need to find ways to connect kids to something that they are passionate about."*

We make the following recommendations with the understanding that helping students identify such passions early might have an impact on all students who are thinking of stopping out:

- Study the University of Michigan's undergraduate research program for underrepresented minority freshmen to learn whether there are aspects that can be replicated within UAA's Undergraduate Research Program.
- Create Major Interest Groups for first-quarter sophomores that function similar to FIGs. These Groups can be organized inside popular majors, focus more narrowly on topic areas in those majors, and require students to explore a sub-topic in those areas. Major Interest Groups may also foster cross-cultural relationships early in students' academic paths, creating a better campus climate.

NEEDS OF SPECIFIC POPULATIONS

The issues that influence students' decisions to leave the UW may be shaded or amplified by students' specific ethnic backgrounds. However, conversations with faculty, staff, and students also suggested that progress in any area that differentially affect minority groups would benefit all underrepresented populations.

In addition, we gathered information on multiracial students. The UW has more multiracial students on campus than students who identify as Black, Latino, or Native American. Data on UW students showed us that multiracial underrepresented minority students tended to have attrition patterns that were similar to those of underrepresented minorities; similarly, multiracial students from groups that were not underrepresented tended to have patterns similar to their Asian American and White counterparts. Furthermore multiracial students with whom we spoke—both those with underrepresented minority backgrounds and those with White and Asian American backgrounds— discussed very complex and difficult explorations of their racial identities, which differed from those of mono-racial students. For example, multiracial students sometimes experienced feeling not fully accepted by other minority students, while at the same time that they were subjected to stereotypes and prejudice from majority students.

With regard to these findings, we make the following recommendations:

- Hire an expert in multiracial identity issues to work jointly in OMA and UAA. We sensed limited awareness about multiracial issues among the faculty and staff we interviewed, some of whom pointed out that there are few people on campus with expertise in helping multiracial students deal with these issues.
- Implement recommendations made previously regarding increasing enrollment of underrepresented minority students, forging closer connections and two-way communication with students' families and communities, including information about underrepresented groups in the undergraduate curriculum, clarifying academic expectations for families, and

helping faculty, staff, and students understand how underrepresented minority students experience the climate at the UW.

- Gather specific information from underrepresented minority students who are considering leaving the UW or who have left the UW (third phase of the UW STAR) to increase our understanding of the needs of students from different ethnic backgrounds, including the needs of multiracial students.

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University of Washington Study of Attrition and Retention (UW STAR)

A. COHORT DEMOGRAPHICS

The following includes tables referred to in the Results section on UW existing data. Note that we excluded students who were younger than 18 years old and who entered the UW with 45 credits or more.

UW First- and Second-Year Attrition: Trends over Time

Table 1A. Attrition for each cohort (1999-2003) by minority status

Cohort 1999	Stop-out: First year		Stop-out: Second year		Retained		
	Count	Row %	Count	Row %	Count	Row %	Total
URM	28	11.8	20	8.4	190	79.8	238
White	162	7.7	145	6.9	1,807	85.5	2,114
Asian American	51	5.6	36	3.9	830	90.5	917
Unknown	34	5.8	36	6.1	516	88.1	586
Total	275	--	237	--	3,343	--	3,855
Cohort 2000	Stop-out: First year		Stop-out: Second year		Retained		
	Count	Row %	Count	Row %	Count	Row %	Total
URM	25	8.7	28	9.7	236	81.7	289
White	186	7.9	144	6.1	2,020	86.0	2,350
Asian American	53	5.0	46	4.3	966	90.7	1,065
Unknown	43	8.3	23	4.4	455	87.3	521
Total	307	--	241	--	3,677	--	4,225
Cohort 2001	Stop-out: First year		Stop-out: Second year		Retained		
	Count	Row %	Count	Row %	Count	Row %	Total
URM	28	8.2	30	8.7	285	83.1	343
White	212	8.7	139	5.7	2,082	85.6	2,433
Asian American	63	5.2	52	4.3	1,100	90.5	1,215
Unknown	55	7.2	41	5.4	666	87.4	762
Total	358	--	262	--	4,133	--	4,753
Cohort 2002	Stop-out: First year		Stop-out: Second year		Retained		
	Count	Row %	Count	Row %	Count	Row %	Total
URM	30	7.9	36	9.4	315	82.7	381
White	160	6.7	128	5.4	2,083	87.9	2,371
Asian American	50	4.4	58	5.2	1,017	90.4	1,125
Unknown	29	6.8	39	9.2	356	84.0	424
Total	269	--	261	--	3,771	--	4,301

Cohort 2003	Stop-out: First year		Stop-out: Second year		Retained		
	Count	Row %	Count	Row %	Count	Row %	Total
URM	30	8.6	15	4.3	304	87.1	349
White	142	6.0	147	6.2	2,081	87.8	2,370
Asian American	57	4.5	59	4.7	1,140	90.8	1,256
Unknown	20	5.9	15	4.4	306	89.7	341
Total	249	--	236	--	3,831	--	4,316

UW First- and Second-Year Attrition: Demographic Differences

Table 2A. Attrition by gender and minority status

Male	Stop-out: First year		Stop-out: Second year		Retained	
	Count	Row %	Count	Row %	Count	Row %
URM	60	8.6	54	7.7	585	83.7
White	373	6.7	339	6.1	4,833	87.2
Asian American	117	4.5	125	4.8	2,338	90.6
Unknown	76	5.5	84	6.1	1,225	88.4
Total	626	--	602	--	8,981	--
Female	Stop-out: First year		Stop-out: Second year		Retained	
	Count	Row %	Count	Row %	Count	Row %
URM	81	9.0	75	8.3	745	82.7
White	489	8.0	364	6.0	5,240	86.0
Asian American	157	5.2	126	4.2	2,715	90.6
Unknown	105	8.4	70	5.6	1,074	86.0
Total	832	--	635	--	9,774	--

Table 3A. Attrition by residency and ethnicity

Residents	Stop-out: First Year		Stop-out: Second Year		Retained	
	Count	Row %	Count	Row %	Count	Row %
Black	17	5.2	26	7.9	285	86.9
Latino	26	7.3	23	6.5	307	86.2
Native American	17	10.6	18	11.2	126	78.3
Pacific Islander	7	12.3	3	5.3	47	82.5
Mixed: URM Ethnicities	31	8.0	28	7.2	328	84.8
Three or more ethnicities	5	18.5	0	.0	22	81.5
Asian American	166	4.2	173	4.4	3,572	91.3
White	631	6.6	531	5.5	8,407	87.9
Mixed: Non-URM Ethnicities	40	7.0	26	4.6	504	88.4
Unknown	123	6.9	88	5.0	1,559	88.1

Non-Residents	Stop-out: First Year		Stop-out: Second Year		Retained	
	Count	Row %	Count	Row %	Count	Row %
Black	6	10.7	7	12.5	43	76.8
Latino	11	18.6	4	6.8	44	74.6
Native American	2	5.9	7	20.6	25	73.5
Pacific Islander	5	12.5	2	5.0	33	82.5
Mixed: URM Ethnicities	13	19.1	6	8.8	49	72.1
Three or more ethnicities	1	3.7	5	18.5	21	77.8
Asian American	51	5.6	41	4.5	825	90.0
White	231	11.2	172	8.3	1,666	80.5
Mixed: Non-URM Ethnicities	17	9.4	11	6.1	152	84.4
Unknown	58	6.7	66	7.6	740	85.6

Student Population Data

The following section provides a description of the student population used in our analyses, emphasizing demographic and academic characteristics. The tables provide summaries for each of the five cohorts, with the final column in each table providing a summary of all the cohorts lumped together.

Table 4A presents the gender distribution of the incoming freshmen in the period between 1999 and 2003. In general, the size of the incoming freshmen population has increased slightly from 4,016 in 1999 to 4,489 in 2003, peaking in 2001 at 5,954. The gender distribution has remained fairly stable during this time period, with female students constituting a small and growing majority (around 53%), as compared with male students (roughly 47%).

Table 4A. Gender

	1999		2000		2001		2002		2003		All cohorts
	Count	%	Count	%	Count	%	Count	%	Count	%	
Male	1,799	46.7	2,051	48.5	2,324	48.9	2,007	46.7	2,028	47.0	10,209
Female	2,056	53.3	2,174	51.5	2,429	51.1	2,294	53.3	2,288	53.0	11,241
Total	3,855	100.0	4,225	100.0	4,753	100.0	4,301	100.0	4,316	100.0	21,450

Table 5A provides the residency status distribution of the students within each of the five cohorts. Residents make up about 75 per cent of the incoming student population, while non-resident citizens constitute about 15%. The proportion of non-residents on student visas has risen slightly from 1% in 1999 to 2.5% in 2003.

Table 5A. Resident status by cohort

	1999		2000		2001		2002		2003		
	Count	%	Count	%	Count	%	Count	%	Count	%	All cohorts
Resident	2,989	77.5	3,179	75.2	3,408	71.7	3,221	74.9	3,230	74.8	16,027
Resident Immigrant	226	5.9	211	5.0	234	4.9	232	5.4	206	4.8	1,109
Non-Resident: Citizen	569	14.8	696	16.5	919	19.3	665	15.5	712	16.5	3,561
Non-Resident: Immigrant	32	.8	33	.8	61	1.3	43	1.0	55	1.3	224
Non-Resident: Student VISA	36	.9	100	2.4	121	2.5	138	3.2	110	2.5	505
Other	3	.1	6	.1	10	.2	2	.0	3	.1	24
Total	3,855	100.0	4,225	100.0	4,753	100.0	4,301	100.0	4,316	100.0	21,450

Table 6A summarizes the special program enrollment of the incoming freshmen. In general, and across all cohorts, there appears to be no major fluctuations. Roughly three-fourths of the incoming students were unaffiliated, with a sizable number of students affiliating with the Educational Opportunity Program (around 15-20%) and very few students being selected into the honors program (3-5%). Notice that no students were listed as honors Program participants in 2003, which may, at least in part, explain the increased proportion of students in the "No Program" category.

Table 6A. Special program enrollment by cohort

	1999		2000		2001		2002		2003		
	Count	%	Count	%	Count	%	Count	%	Count	%	All cohorts
No Program	2,859	74.2	3,049	72.2	3,305	69.5	3,130	72.8	3,403	78.8	15,746
EOP	590	15.3	801	19.0	1078	22.7	760	17.7	709	16.4	3,938
Honors	185	4.8	147	3.5	154	3.2	191	4.4	0	.0	677
Athletics	64	1.7	75	1.8	88	1.9	97	2.3	82	1.9	406
Honors/EOP	9	.2	8	.2	8	.2	7	.2	0	.0	32
Athletics/EOP	1	.0	3	.1	5	.1	6	.1	7	.2	22
Other	147	3.8	142	3.4	115	2.4	110	2.6	115	2.7	629
Total	3,855	100.0	4,225	100.0	4,753	100.0	4,301	100.0	4,316	100.0	21,450

Note. The 2003 cohort had no students listed as honors students in the UW Student Database.

Table 7A provides SAT scores of the student population. SAT scores have generally risen since 1999, especially among Asian American and Caucasian students. Underrepresented minorities tend to have lower SAT scores than their Asian American and Caucasian peers.

Table 7A. SAT scores

	1999	2000	2001	2002	2003	All cohorts	
	Mean	Mean	Mean	Mean	Mean	Mean	SD
URM	1,070	1,053	1,072	1,045	1,073	1,062	173
White	1,174	1,175	1,173	1,190	1,194	1,181	145
Asian American	1,115	1,127	1,115	1,128	1,147	1,127	168
Unknown	1,169	1,169	1,173	1,182	1,188	1,174	153
Total	1,153	1,154	1,151	1,160	1,170	1,157	158

As shown in Table 8A, there appears to be a small, yet persistent, increase in the average high school GPA across all ethnicity categories in the time period from 1999 to 2003. Moreover, and within each of the five cohorts, underrepresented minority students have noticeably lower high school GPAs as compared with Asian American and White students.

Table 8A. High school GPA

	1999	2000	2001	2002	2003	All cohorts	
	Mean	Mean	Mean	Mean	Mean	Mean	SD
URM	3.47	3.48	3.51	3.46	3.57	3.49	.38
White	3.65	3.66	3.66	3.69	3.71	3.67	.29
Asian American	3.64	3.66	3.62	3.67	3.69	3.65	.28
Unknown	3.64	3.60	3.60	3.64	3.67	3.62	.31
Total	3.63	3.64	3.63	3.66	3.69	3.65	.30

Table 9A provides UWGPA as of the last quarter of enrollment. As compared with high school GPAs, UW GPAs are generally lower across all the student groups; though, UW GPAs have slightly risen since 1999. Underrepresented minority students have lower UW GPAs than Asian American and Caucasian students.

Table 9A. UWGPA

	1999	2000	2001	2002	2003	All cohorts	
	Mean	Mean	Mean	Mean	Mean	Mean	SD
URM	2.83	2.79	2.86	2.87	2.94	2.86	.66
White	3.12	3.15	3.17	3.20	3.21	3.18	.54
Asian American	3.02	2.99	3.02	3.09	3.10	3.04	.58
Unknown	3.11	3.11	3.16	3.22	3.20	3.15	.54
Total	3.08	3.08	3.11	3.15	3.16	3.12	.57

Stop-Outs

Table 10A. Stop-out status by gender

		Male	Female
Stop-out: Freshman Year	Count	626	832
	%	42.9	57.1
Stop-out: Sophomore Year	Count	602	635
	%	48.7	51.3
Retained	Count	8,981	9,774
	%	47.9	52.1
Overall	Count	10,209	11,241
	%	47.6	52.4

Table 11A. Stop-out status by special program

		No Program	EOP	Honors	Athletics	Honors/EOP	Athletics/EOP	Other
Stop-out: First Year	Count	1,047	335	17	16	0	0	43
	%	71.8	23.0	1.2	1.1	.0	.0	2.9
Stop-out: Second Year	Count	866	281	15	21	0	0	54
	%	70.0	22.7	1.2	1.7	.0	.0	4.4
Retained	Count	13,833	3,322	645	369	32	22	532
	%	73.8	17.7	3.4	2.0	.2	.1	2.8
Overall	Count	15,746	3,938	677	406	32	22	629
	%	73.4	18.4	3.2	1.9	.1	.1	2.9

Table 12A. Stop-out status by residency

		Resident	Resident Immigrant	Non-Resident Citizen	Non-Resident Immigrant	Non-Resident Student VISA	Non-Citizen Other
Stop-out: First Year	Count	1,011	52	358	14	23	0
	%	69.3	3.6	24.6	1.0	1.6	.0
Stop-out: Second Year	Count	860	56	260	16	45	0
	%	69.5	4.5	21.0	1.3	3.6	.0
Retained	Count	14,156	1,001	2,943	194	437	24
	%	75.5	5.3	15.7	1.0	2.3	.1
Overall	Count	16,027	1,109	3,561	224	505	24
	%	74.7	5.2	16.6	1	2.4	.1

B. ETHNICITY CLASSIFICATIONS

In the planning stages of our study, a decision was made to carry out our analyses using multiple ethnicity classifications to achieve a deeper and more comprehensive understanding of retention patterns across the wide array of student subpopulations. The reasoning behind our classifications is detailed below. Table 1B provides the four classifications employed in our analyses.

Table 1B. Ethnicity classification schemes

Ethnicity Classification #1	Ethnicity Classification #2	Ethnicity Classification #3 (Minority status)	Ethnicity Classification #4 (Mixed ethnicity status)
		URM	
Black	Black, including Black/Pacific Islander		Black
Latino	Latino, including Black/Latino, Latino/Pacific Islander		Latino
Native American	Native American		Native American
Pacific Islander	Pacific Islander, including Pacific Islander/White		Pacific Islander
			Mixed: Underrepresented minority ethnicities
Asian American/Black	Asian American/Black		
Asian American/Latino	AsianAmerican/Latino		
Asian American/Native American			
Black/Latino			
Black/Native American			
Black/Pacific Islander			
Black/White	Black/White		
Latino/Native American			
Latino/Pacific Islander			
Latino/White	Latino/White		
Native American/White			
	Native American/Other (Asian American, Black, Latino, White)		
Pacific Islander/White			
Three or more ethnicities	Three or more ethnicities		Three or more ethnicities
White	White	White	White
Asian American	Asian American	Asian American	Asian American
			Mixed: Non-underrepresented minority ethnicities
Asian American /Asian American	Asian American /Asian American		
Asian American /White	Asian American /White		
Unknown (e.g., Other, Not Indicated, etc.)	Unknown (e.g., Other, Not Indicated, etc.)	Unknown (e.g., Other, Not Indicated, etc.)	Unknown (e.g., Other, Not Indicated, etc.)

Ethnicity Classification #1 was the most detailed classification scheme, allowing unprecedented comparisons of various multiracial categories. However, and as shown in Table 2B, because of the low number of students in several of the multiracial categories, a decision was made to lump together some of these categories for the purpose of further analyses.

Table 2B. Ethnicity Classification #1

	1999		2000		2001		2002		2003		All cohorts
	Count	%	Count	%	Count	%	Count	%	Count	%	Count
Black	55	1.4	88	2.1	81	1.7	83	1.9	77	1.8	384
Latino	60	1.6	69	1.6	92	1.9	107	2.5	87	2.0	415
Native American	33	.9	40	.9	34	.7	51	1.2	37	.9	195
Pacific Islander	9	.2	17	.4	21	.4	20	.5	30	.7	97
Asian Amer/Black	1	.0	6	.1	7	.1	11	.3	13	.3	38
AsianAmer/Latino	6	.2	5	.1	6	.1	9	.2	12	.3	38
AsianAmer/Native Amer	0	.0	0	.0	0	.0	1	.0	0	.0	1
Black/Latino	0	.0	2	.0	3	.1	1	.0	2	.0	8
Black/Native Amer	1	.0	2	.0	0	.0	2	.0	0	.0	5
Black/Pacific Islander	1	.0	0	.0	1	.0	1	.0	0	.0	3
Black/White	14	.4	15	.4	13	.3	25	.6	19	.4	86
Latino/Native Amer	2	.1	0	.0	1	.0	8	.2	4	.1	15
Latino/Pacific Islander	0	.0	1	.0	0	.0	1	.0	0	.0	2
Latino/White	43	1.1	24	.6	53	1.1	44	1.0	54	1.3	218
Native Amer/White	2	.1	5	.1	11	.2	4	.1	0	.0	22
Pacific Islander/White	1	.0	6	.1	4	.1	2	.0	6	.1	19
Three or more ethnicities	10	.3	9	.2	16	.3	11	.3	8	.2	54
White	2,114	54.8	2,350	55.6	2,433	51.2	2,371	55.1	2,370	54.9	11,638
Asian American	779	20.2	922	21.8	1,056	22.2	998	23.2	1,073	24.9	4,828
Asian Amer/Asian Amer	53	1.4	53	1.3	61	1.3	20	.5	12	.3	199
Asian Amer/White	85	2.2	90	2.1	98	2.1	107	2.5	171	4.0	551
Unknown (e.g., Other, Not Indicated, etc.)	586	15.2	521	12.3	762	16.0	424	9.9	341	7.9	2,634
Total	3,855	100.0	4,225	100.0	4,753	100.0	4,301	100.0	4,316	100.0	21,450

The resultant second categorization scheme, *Ethnicity Classification #2*, became the primary ethnicity classification used in this report, containing multiracial categories defined as follows:

- Asian American/Asian American: students identifying as a combination of two Asian American ethnicities.
- Asian American/Black: students identifying as Asian American and Black/African American.
- Asian American/Latino: students identifying as Asian American and Latino(a).
- Asian American/White: students identifying as Asian American and White/Caucasian.
- Black/White: students identifying as Black/African American and White/Caucasian.
- Latino/White: students identifying as Latino(a) and White/Caucasian.
- Native American/Other: students identifying as Native American and Asian American, Black, Latino(a), or White.
- Three of more ethnicities: students identifying with three or more ethnicities.

In addition, some multiracial students were placed into single-race categories. These re-categorizations were generated by placing students back into the category in which the UW would generally assign them according to federal guidelines. Note that all students who indicate "Latino" ethnicity are placed into the Latino category, regardless of race.

- Pacific Islander/White students (19 students): categorized as Pacific Islander
- Black/Pacific Islander (3 students): categorized as black
- Black/Latino students (9 students): categorized as Latino
- Latino/Pacific Islander (2 students): categorized as Latino

The ethnicity distribution using this classification is provided in Table 3B.

Table 3B. Ethnicity Classification #2

	1999		2000		2001		2002		2003		All cohorts
	Count	%	Count	%	Count	%	Count	%	Count	%	Count
Black	56	1.5	88	2.1	82	1.7	84	2.0	77	1.8	387
Latino	60	1.6	72	1.7	95	2.0	109	2.5	89	2.1	425
Native Amer	33	.9	40	.9	34	.7	51	1.2	37	.9	195
Pacific Islander	10	.3	23	.5	25	.5	22	.5	36	.8	116
Asian Amer/Black	1	.0	6	.1	7	.1	11	.3	13	.3	38
Asian Amer/Latino	6	.2	5	.1	6	.1	9	.2	12	.3	38
Black/White	14	.4	15	.4	13	.3	25	.6	19	.4	86
Latino/White	43	1.1	24	.6	53	1.1	44	1.0	54	1.3	218
Native Amer/Other	5	.1	7	.2	12	.3	15	.3	4	.1	43
Three or more ethnicities	10	.3	9	.2	16	.3	11	.3	8	.2	54
White	2,114	54.8	2,350	55.6	2,433	51.2	2,371	55.1	2,370	54.9	11,638
Asian American	779	20.2	922	21.8	1,056	22.2	998	23.2	1,073	24.9	4,828
Asian Amer/Asian Amer	53	1.4	53	1.3	61	1.3	20	.5	12	.3	199
Asian Amer/White	85	2.2	90	2.1	98	2.1	107	2.5	171	4.0	551
Unknown (e.g., Other, Not Indicated, etc.)	586	15.2	521	12.3	762	16.0	424	9.9	341	7.9	2,634
Total	3,855	100.0	4,225	100.0	4,753	100.0	4,301	100.0	4,316	100.0	21,450

A decision was also made to categorize students according to their status as underrepresented minorities at the University. This categorization, *Ethnicity classification #3*, was made up of the following four categories:

- Underrepresented minority (URM): students identifying as Native American, Black, Pacific Islander, Latino, White/Black, White/Native American, White/Pacific Islander, White/Latino, Black/Asian American, Black/Native American, Black/Pacific Islander, Black/Latino, Asian American/Native American, Asian American/Latino, Native American/Latino, Pacific Islander/Latino, and Three or more races
- White: students identifying as White or Caucasian
- Asian American: students identifying as Asian American, White/Asian American or Asian American/Asian American
- Unknown: students selecting Other, Not Indicated, etc.

Note that Asian American students are not considered minority students at the UW. The minority status and ethnicity distribution is provided in Table 4B.

Table 4B. Ethnicity Classification #3 (minority status)

	1999		2000		2001		2002		2003		ll cohorts
	Count	%	Count	%	Count	%	Count	%	Count	%	Count
URM	238	6.2	289	6.8	343	7.2	381	8.9	349	8.1	1,600
White	2,114	54.8	2,350	55.6	2,433	51.2	2,371	55.1	2,370	54.9	11,638
Asian Amer	917	23.8	1,065	25.2	1,215	25.6	1,125	26.2	1,256	29.1	5,578
Unknown	586	15.2	521	12.3	762	16.0	424	9.9	341	7.9	2,634
Total	3,855	100.0	4,225	100.0	4,753	100.0	4,301	100.0	4,316	100.0	21,450

The final classification, *Ethnicity Classification #4,* provides a combination of multiracial and minority status categories. Table 5B provides a summary of this classification. It is worthy of note that multiracial students with minority status tend to make up about 2.1% of the total incoming student population, which is slightly higher than each of the single-race minority groups, such as Native American, Black, Pacific Islander, or Latino.

Table 5B. Ethnicity Classification #4 (multiracial and minority status)

	1999		2000		2001		2002		2003		All cohorts
	Count	%	Count	%	Count	%	Count	%	Count	%	Count
Black	55	1.4	88	2.1	81	1.7	83	1.9	77	1.8	384
Latino	60	1.6	69	1.6	92	1.9	107	2.5	87	2.0	415
Native American	33	.9	40	.9	34	.7	51	1.2	37	.9	195
Pacific Islander	9	.2	17	.4	21	.4	20	.5	30	.7	97
Mixed: URM Ethnicities	71	1.8	66	1.6	99	2.1	109	2.5	110	2.5	455
Three or more ethnicities	10	.3	9	.2	16	.3	11	.3	8	.2	54
White	2,114	54.8	2,350	55.6	2,433	51.2	2,371	55.1	2,370	54.9	11,638
Asian American	779	20.2	922	21.8	1056	22.2	998	23.2	1073	24.9	4,828
Mixed: Non-URM Ethnicities	138	3.6	143	3.4	159	3.3	127	3.0	183	4.2	750
Unknown	586	15.2	521	12.3	762	16.0	424	9.9	341	7.9	2,634
Total	3,855	100.0	4,225	100.0	4,753	100.0	4,301	100.0	4,316	100.0	21,450

C. INTERVIEW PROTOCOL

The Provost's Office has funded a study on retention/attrition of ethnically underrepresented students to see if we can find out why our underrepresented students leave the UW at higher rates than other students.

The first part of this study is to gather the collected wisdom of those who work closely with underrepresented students, and that's why we wanted to talk with you.

We have some questions here, but really we're hoping that this is a conversation, because we aren't fully sure we even know the right questions to ask. So please feel free to interrupt and suggest and take over.

Cathy will be taking notes, but we will never identify you by name in any reports or other documents, although we may use quotations from these conversations.

In your opinion or from your experience, why do you think underrepresented students leave the UW?

- How did you form this opinion—is this from students you work with, reading you've done, conversations you've had?
- Have you noticed differences in why students leave between groups of underrepresented students?
- For example, do Native American students drop out for different reasons than African American students?
- Have you noticed any patterns in the retention issues within the Asian American population?
- Any thoughts about students with mixed ethnicity? Are retention issues for those students unique or similar to those for other underrepresented students?
- What about resiliency? Do you have any thoughts regarding what might make some underrepresented minority students persist or succeed when others do not?
- In your experience here, do you think this situation has changed over time or not?
- Do you have ideas about what could be done to improve retention of underrepresented students?
- It appears that certain things have *already* been done that have improved retention rates (e.g., first-year retention figures have vastly improved), what existing programs are best suited at dealing with this "problem?"
- If you had one question to ask students who've left the UW besides why, what would that be?

Please feel free to email us if you have other ideas or comments you'd like to share with us on these issues.

University of Washington Study of Attrition and Retention (UW STAR)

D. CLASSROOM LEARNING ENVIRONMENT FORM

University of Washington Study of Attrition and Retention (UW STAR)

Classroom Learning Environment

Use a No. 2 pencil only.   Fill in bubbles darkly and completely.   Erase errors cleanly.

Instructor _____   Course _____   Section _____   Date _____

This questionnaire is intended to provide information that will be used to improve teaching and learning at this institution. You may leave any or all of the questions blank, including the personal descriptors at the bottom of the page. All answers are <u>anonymous</u> and will be reported only as part of group results.

	DISAGREE			AGREE		
	Strongly		Somewhat	Somewhat		Strongly

expression of ideas, opinions, and beliefs.

1. This class provides an environment for the free and open — O O O   O O O

part of my college education.
2. Learning about different cultures or perspectives is an essential — O O O   O O O

3. Sometimes I am singled out in this class because I am different from most of the other students. — O O O   O O O

4. Grades are assigned fairly and impartially in this class. — O O O   O O O

5. I enjoy taking courses that challenge my beliefs and values. — O O O   O O O

6. I am often ignored in this class even when I attempt to participate. — O O O   O O O

7. The classroom environment is comfortable and accessible for students with any type of disability. — O O O   O O O

class.
8. The instructor encourages equal participation of all students in this — O O O   O O O

9. I feel isolated in this class. — O O O   O O O

10. I enjoy talking with people who have values different from mine. — O O O   O O O

11. The instructor makes me feel welcome in this class. — O O O   O O O

12. Your class level	14. Racial/ethnic background (mark all that apply)	15. Age	17. Gender
O Freshman		O 17 or younger	O Female
O Junior	O Asian American	O 19	
			O Other (specify):
O Sophomore	O African/Black American	O 18	O Male
O Senior	O European/White American	O 20-21	
O Other (specify):	O Hispanic/Latino American		
		O 25 or older	

O Grad/Prof

O Filipino American

O 22-24

O Native American/American

. Sexual orientation

_____

18

_____

13. Is English your
primary language?
O Yes
O No

Indian
O Pacific Islander American
International
O Other (specify):

_____

16. Are you a person
with a disability?
O Yes
O No

O Bisexual
O Gay
O Heterosexual
O Lesbian
O Questioning
O Other (specify):

_____

19. Do you have any other thoughts about the learning environment of this class?

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